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ABSTRACT

A study confirmed the need for an ambulatory nursing experience as part of the vocational nursing (VN) program at the Long Beach City College (LBCC). Information on which to base the revision of the ambulatory care (AC) experience was obtained from a literature review and interviews with the following: AC administrators, California Board of Vocational Nurse and Psychiatric Technician Examiners, VN faculty, students who had completed the AC experience, staff of AC facilities, and California VN directors. The structure of the program was analyzed and modified to support an AC experience by amending the VN program philosophy and reclassifying the taxonomy of nursing diagnosis. Content was revised by synthesizing and integrating information from the literature review. The universal self-care deficits from Orem's Self-Care Deficit Theory of Nursing were used as the organizing principle to rearrange the six AC learning tools. The use of the five-step nursing process for vocational nurses was explored and validated. After revision, LBCC faculty and the AC agency administrators evaluated the experience, measuring it against Tyler's (1949) four fundamental curriculum development questions. An evaluation plan was developed from the literature on outcome assessment. (Appendixes include 246 references, interview outlines, evaluation results, LBCC curriculum structure documents, and student learning tools.) (YLB)

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ED 360 543

VALIDATION, REVISION, AND EVALUATION OF A CLINICAL EXPERIENCE USING AMBULATORY CARE FACILITIES AS LEARNING SITES FOR STUDENT NURSES

by

Faye M. Gregory

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Abstract of a Major Applied Research Project Presented
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VALIDATION, REVISION, AND EVALUATION OF A CLINICAL EXPERIENCE USING AMBULATORY CARE FACILITIES AS LEARNING SITES FOR STUDENT NURSES

by

Faye M. Gregory

March 1993

Since 1987, the Long Beach City College (LBCC) in Long Beach, California has included a clinical experience in ambulatory care facilities as a part of the vocational nursing (VN) program. The purposes of this study were to confirm the need for an ambulatory nursing experience, to reconstruct the present LBCC ambulatory care experience, and to develop a plan for evaluating the revised experience. The following research questions were investigated: (1) What circumstances suggest a need for an ambulatory care clinical experience? (2) Is the LBCC VN program structured so that it will support the ambulatory care clinical experience? (3) How shall a nursing theory, nursing diagnosis, critical thinking, wellness and prevention of illness be integrated into the ambulatory care experience? (4) How shall the ambulatory care clinical experience be evaluated?

The need for a clinical experience in an ambulatory care facility was confirmed through a literature review, and interviews with agency administrators. Information, upon which to base the revision of the ambulatory care experience, was obtained from the literature review; three ambulatory care administrators; the executive officer and a nursing consultant from the California Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE); and the VN faculty. In addition, data were obtained from surveys, conducted with thirty-four students who had completed the ambulatory care experience, sixteen LBCC VN faculty, 113 staff members from five ambulatory care facilities, and fifty-seven California VN directors.

The structure of the program was analyzed and modified to support an ambulatory care experience by amending the VN program philosophy and re-classifying the taxonomy of nursing diagnosis. The content for the ambulatory care experience was revised by synthesizing and integrating information from the literature review. The universal self-care deficits from Orem's Self-Care Deficit Theory of Nursing (SCDTN) were used as the organizing principle to rearrange the six ambulatory care learning tools. Wellness, as subject matter for the learning tools, was confirmed. The use of the five step nursing process, including nursing diagnosis, for vocational nurses was explored and validated. After revision, the LBCC VN faculty and the ambulatory care agency administrators, initially evaluated the experience, measuring it against Tyler's (1949) four fundamental curriculum development questions. Also, an evaluation plan, to be used in the future, was developed from the literature on outcome assessment.

During personal interviews, the BVNPTE officials encouraged schools to explore using ambulatory care facilities as educational sites, if the schools can develop an appropriate structure for the experience and have acceptable clinical sites. All three of the ambulatory care administrators supported and verified the appropriateness of the ambulatory care learning experience. The BVNPTE consultant, the agency administrators, and the sixteen members of the LBCC faculty assessed and approved the criteria that had been written for establishing an ambulatory care experience, conducted without the daily supervision of an on-site clinical instructor.

The students who had completed the revised ambulatory care learning experience judged all the learning tools to be useful and efficient in accomplishing the objectives for which they were designed. The BVNPTE consultant and the LBCC VN faculty ranked most of the forty-three elements of the learning tools as "essential." Most of the ambulatory care staff nurses had practiced the elements of the learning tools, while they were in school, and most California VN schools currently teach the elements. However, in most schools, clinical

practice of these elements takes place primarily in hospitals. The staff nurses tended to practice ambulatory care skills more in ambulatory care settings than do students in California VN schools.

It was recommended that both the National Council of State Boards of Nursing and the BVNPTE examine the Taxonomy of Educational Objectives (Bloom et al., 1956) and then scrutinize the assumptions upon which they base their conclusion that the intellectual skills of analysis and synthesis are beyond the scope of practice for vocational nurses. If grade school children are expected to learn to use these intellectual skills, (Bloom et al., 1956) it seems unreasonable to limit adult learners in such an arbitrary way. VN programs should evaluate the advantages and disadvantages of using the five step nursing process that includes using analysis and synthesis to make nursing diagnoses, rather than the older four step process. VN programs that still design their curricula around the medical model should consider adopting a nursing theory.

As a result of the study, a growing need for students to be educated in ambulatory care nursing was established and a curriculum for teaching nursing care in ambulatory care settings was validated. The revised ambulatory care experience provides a model for teaching nursing care in ambulatory care settings that can facilitate the use of these clinical agencies by other nursing programs.

TABLE OF CONTENTS

Page

LIST OF TABLES xi

LIST OF FIGURES xii

Chapter

1. INTRODUCTION 1

Statement of the Problem 1

Background and Significance 2

Purposes and Research Questions 7

Definitions of Terms 8

Assumptions 10

Limitations 11

2. REVIEW OF THE LITERATURE 12

Changes in the Delivery of Health Care that Support Ambulatory Care Growth 12

The Effect of Health Maintenance Organizations and Diagnostic Related Groups 12

The Effect of the Aging American Population 22

The Effect of the Nursing Jobs Market 23

Structure for the Vocational Nursing Program to Support an Ambulatory Care Experience 24

Key Parts of Accreditation Guidelines 24

Philosophy 25

Essential components of a curriculum 26

Structure of the Curriculum at LBCC 29

Nursing Process 31

TABLE OF CONTENTS (cont.)

Page

Self-Directed Learning 31

Setting up the Clinical Experience 33

Clinical Laboratory 34

Orem's Self-Care Deficit Theory of Nursing 35

Nursing Theory Development 36

Nursing Theory in the LBCC VN Program 38

Development and Content of Orem's SCDTN 38

Use of Conceptual Models 42

Criticism of Orem's SCDTN 44

Application of Orem's SCDTN 45

Differentiation Between Nursing and Medical Treatment 46

Using Orem's SCDTN in the Clinical Setting 49

Nursing Diagnosis and Critical Thinking 52

Vocational Nursing's Place in the Field of Nursing and the Entry-Into Practice Controversy 52

History of the Nursing Process, the Place of Nursing Diagnosis and Its Meaning to Nursing 56

The Vocational Nursing Scope of Practice, the Taxonomy of Educational Objectives and Nursing Diagnosis 59

Critical Thinking 69

Nursing Diagnosis in the LBCC VN Program 75

Wellness and Prevention of Illness 80

Definition of Health 80

National, State, and Local Perspectives on Wellness and Prevention of Disease 81

Nursing's Agenda for Health Care Reform 82

TABLE OF CONTENTS (cont.)

Page

Other Nursing Perspectives on Health Care for Wellness 83

Nursing Practice in Ambulatory Care 90

Trends in Ambulatory Nursing Care 91

Skills Used in Ambulatory Care Nursing 99

Evaluation of the Ambulatory Care Experience 104

3. METHODOLOGY AND PROCEDURES 114

Introduction 114

Methodology 115

Procedures 115

Recent Changes in Delivery of Health Care that Support the Ambulatory Care Experience 115

Strategies Related to Revision of the VN Program Structure 117

Procedures Used to Revise Learning Materials for the Ambulatory Care Experience 119

Interview Procedures 125

Survey Procedures 126

The Collection of Data Related to Evaluation of the Ambulatory Care Experience 129

4. PRESENTATION OF RESULTS 131

Introduction 131

Results 131

Recent Changes in the Delivery of Health Care that Support the Ambulatory Care Experience 131

Structural Revisions of the VN Program to Support an Ambulatory Care Experience 135

Revisions in the Learning Materials for the Ambulatory Care Experience 136

TABLE OF CONTENTS (cont.)

Page

Interview Results 142

Sociodemographic Information from the Four Surveys 165

Responses to the Questions from the Four Surveys 172

Evaluation of the Clinical Experience 191

5. DISCUSSION, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS 194

Discussion of Results 194

The Need for an Ambulatory Care Clinical Experience 194

A Supportive Program Structure 194

Integration of Theory, Process and Content 195

Evaluation 200

Conclusions and Implications 203

Recommendations for Implementation, Dissemination, and the Improvement of Practice 205

BIBLIOGRAPHY 209

APPENDICES

A. BVNPTE EXECUTIVE OFFICER'S INTERVIEW OUTLINE 224

B. BVNPTE CONSULTANT'S INTERVIEW OUTLINE 235

Board Policy: 3.3 COMMUNITY HEALTH AGENCIES 242

Board Policy: Skills Expected to Be Taught in Vocational Nursing Programs 243

C. AMBULATORY ADMINISTRATORS' INTERVIEW OUTLINE 244

D. LONG BEACH CITY COLLEGE STUDENTS' EVALUATION OF THE AMBULATORY CARE LEARNING PROJECTS 251

E. STAFF NURSES' EVALUATION OF THEIR NURSING SCHOOL'S AMBULATORY CARE CLINICAL EXPERIENCE 257

TABLE OF CONTENTS (cont.)

Page

F. LBCC FACULTY EVALUATION OF THE STRUCTURE AND NURSING SKILLS IN AN AMBULATORY CARE CLINICAL EXPERIENCE 264
G. CALIFORNIA VOCATIONAL NURSING DIRECTORS' REPORT OF THEIR PROGRAM'S EDUCATIONAL PREPARATION FOR AMBULATORY CARE NURSING 270

H. LBCC CURRICULUM STRUCTURE DOCUMENTS 276

Philosophy 277

Curriculum Objectives 279

LBCC Taxonomy of Nursing Diagnoses 280

I. STUDENT LEARNING TOOLS 281

Developmental Levels: Older Adult Class Schedule 283

Older Adult Ambulatory Care—Clinical Behavioral Objectives 284

Older Adult Ambulatory Care—Clinical Evaluation 286

Quick Baseline Assessment 287

Self-Care History 288

Nursing Physical Assessment 289

Self-Care Management of Medications 290

Self-Care Management of Diet 291

Self-Care Management of Exercise 292

BIOGRAPHICAL SKETCH OF FAYE M. GREGORY 293

LIST OF TABLES

Table Page

1. HMO Growth 1976-1990 15

2. HMO Growth Projections 15

3. Community Hospital Inpatient Days Versus Outpatient Visits 1979-1989 20

4. Steps in the Nursing Process 63

5. Critical Thinking Throughout the Nursing Process 73

6. Frequency of Nursing Interventions Performed 97

7. Structural Criteria for an Ambulatory Care Experience 156

8. Evaluation of the Elements of the Ambulatory Care Learning Tools 160

9. California Vocational Nursing Programs Sociodemographics 169

10. Faculty Assessment of the Criteria for an Ambulatory Care Experience 178

11. Faculty Assessment of the Elements of the Ambulatory Care Learning Tools 181

12. Where Staff Nurses Learned and Today's Schools Teach Ambulatory Care Concepts 183

13. Where Staff Nurses Practiced and Today's Schools Practice(d) Ambulatory Care Concepts 183

14. Summary of Places Where Staff Nurses Practiced Ambulatory Care Skills 185

15. Summary of Places Where Students Practiced Ambulatory Care Skills . . . 189

LIST OF FIGURES

Figure Page

1. Constituent Theories, The Self-Care Deficit Theory of Nursing 40
2. Activities of RNs and LVNs 98
3. Number of Learning Tools Completed 175
4. Remembered Content of the Learning Tools 175
5. Number of Learning Tools Completed within Time Limits 175
6. Percent related to Orem's Self-Deficit Theory of Nursing 176
7. Utility Value of the Information Provided by the Learning Tools 176
8. Percentage of Clients for Whom Time Is Available for Selected Health Teaching 176
9. Where Staff Nurses Learned and Today's Schools Teach Ambulatory Care Concepts 184
10. Where Staff Nurses and Today's Schools Practice(d) Ambulatory Care Concepts 184

Chapter 1

INTRODUCTION

Statement of the Problem

In the past, ambulatory care was in the shadow of hospitals, but now the hospitals are becoming alternative care sites for ambulatory care settings (Jonas, 1986). The opening of these new ambulatory care facilities has created nursing staff openings and has expanded the job market for vocational nursing graduates. Harriman Jones Medical Group, a multi-specialty medical group practice in Long Beach, California, has greatly expanded its practice and recently moved from several small neighborhood clinics to a new six-storied ambulatory care facility. Robbins (1992), Director of Nursing for Harriman Jones verified the need for more nurses in ambulatory care, during a personal interview. She stated that she would like to hire many more Licensed Vocational Nurses (LVNs) than are applying for jobs. Robbins also commented that she feels that students will seek jobs in a clinical area where they have had some experience and feel comfortable. Therefore, she is anxious to have vocational nursing students have a satisfying clinical experience in the Harriman Jones ambulatory care facility.

Traditionally, ambulatory care facilities have not been extensively used as clinical sites for nursing education. Teachers have been concerned that there were insufficient opportunities for required learning experiences in ambulatory care facilities. California regulations allow a one to fifteen teacher-student ratio that can usually be accommodated in traditional hospital settings. Most ambulatory care facilities can accommodate only one to six nursing students at a time. Thus, the difficulty of providing adequate teacher supervision has been a serious obstacle to the use of these facilities as clinical learning sites.

Without an ambulatory care clinical experience as a part of the basic program, students are unlikely to feel comfortable in seeking employment in this specialized area, even though many job opportunities are available. The problem is to provide an appropriate ambulatory care experience for nursing students so they will want to work in these facilities where they will be educationally prepared for such work.

Background and Significance

Changes in Medicare and private insurance payment for health care services have had a profound effect on health care delivery in the United States. Hospitalization has decreased while care in ambulatory (out of hospital) settings has increased ("Changing Universe," 1986). Jonas (1986), in the preface to his book Health Care Delivery in the United States, explains that he found it necessary to write a second and third edition within nine years to describe these profound changes. He added several new chapters, one being, "Health Maintenance Organizations." On page 166, he states, "Americans are leaving the traditional fee-for-service sector and are taking their ills and aches to the medical supermarkets of the future: Health Maintenance Organizations (HMOs)." Jonas also quotes Freudenheim, who stated that in the future, prepaid health plans will be the dominant form of health care delivery. Rosdahl (1985) states that the increase in the number of aged persons with limited and fixed incomes, dictates more ambulatory care for minor ailments rather than hospital care.

Johnson (1988), editor of a series on nursing administration, comments that

> A significant outcome of recent changes in the health care system has been the movement of health care services for an increasing number of clients out of the hospital setting and into outpatient and community settings. Changing the service setting has resulted in the need to redefine ambulatory care services, thereby providing a unique opportunity to redefine the nursing role in ambulatory care.

Andrastek (1990) is a regional nurse manager for FHP, Inc., a managed health care organization. She commented that managed care organizations in the United States had nearly thirty-four million members in 1988. She also stated that this number is increasing each year. Because ambulatory care facilities are becoming such a important locus of health care, student nurses need to have part of their educational experience in this type of clinical setting.

Long Beach City College (LBCC) is a two year community college, founded in 1927 in Long Beach, California. The college offers a wide range of programs in both liberal arts and occupational programs to nearly 30,000 students (LBCC Catalog, 1991-92). The college has an annual income of nearly fifty-seven million dollars. Student ethnicity is distributed as follows: Caucasian, forty-seven percent; Hispanic, twenty percent; African-American eleven percent; Asian, eleven percent; and Pacific Islanders, four percent. There are 342 full-time faculty, 510 part-time faculty, and 866 courses are taught (LBCC Profile, 1991).

The Vocational Nursing Program is housed on both the Pacific Coast Campus and the Liberal Arts Campus. Depending upon student and teacher availability, either thirty or forty-five students are admitted each semester to the three semester vocational nursing (VN) program. The students may complete the program earning either a certificate or an associate degree. Vocational nursing is considered the first academic step on a nursing career ladder. Licensed vocational nurses are granted advanced placement into the second year of the LBCC registered nursing program. Graduates of the registered nursing program are admitted as juniors to the bachelor's degree in nursing program at California State University Long Beach (LBCC Vocational Nursing Curriculum Guide, 1992).

In the fall of 1987, the district nursing education supervisor of FHP, Inc., met with the faculty of the Vocational Nursing Department of Long Beach City College. She asked the faculty to consider a clinical experience for students in the ambulatory care facilities of that agency. This request presented a major difficulty. Each FHP, Inc. facility could accommodate only two to four students. For supervision of clinical experience, the California Vocational Nursing Practice Act issued by the Board of Vocational Nurse and

Psychiatric Technician Examiners (1987:127) specifies that "there shall be a maximum of fifteen students for each instructor." To maintain reasonable efficiency, schools need to have each instructor supervise close to the legal maximum number of students. Ambulatory care facilities that could only accommodate two to four students seemed to be unusable. However, there is a Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE) policy that permits students to have a fifty-four hour experience in a community health agency. This policy only requires that a teacher make weekly visits with the students (see BVNPTE Policy 3.3 in Appendix C on page 242). The faculty determined that such an independent experience might be feasible and appropriate.

Two other difficult problems occurred. Although there were several FHP, Inc. facilities available, they could not accommodate all the students who needed to have the experience. To resolve this problem the Long Beach City College faculty approached other local ambulatory care agencies. Harriman Jones Medical Offices, a locally owned Health Maintenance Organization (HMO) and Long Beach Comprehensive Health Care, a Los Angeles County ambulatory care facility, agreed to accept the vocational nursing students for a community health agency experience. Each of the agencies signed contracts and the BVNPTE granted approval to use each facility. Scheduling the ambulatory care experience so that other learning experiences were not disrupted proved to be very difficult. The fifty-four hours permitted by the BVNPTE, occupies a two week block of time in the normal vocational nursing schedule and this two weeks had to come out of an eight week block. The faculty did not want to set up a schedule that required one fourth of the students to be absent from another experience at two week intervals. To resolve this problem, the faculty petitioned the BVNPTE for an exemption that would allow a four week experience. The board granted this exemption and allowed the ambulatory care experience to be 108 hours long, with three clinical days each week for four weeks.

To obtain approval for the increased clinical time, the BVNPTE required that behavioral objectives be prepared. The faculty hastily developed a course plan but had little time to evaluate it thoroughly. The faculty had recently adopted Orem's Self-Care Deficit Theory of Nursing (a theoretical proposition that a nurse's major role is to help sick persons learn to care for themselves again) as the curriculum foundation for the entire vocational nursing program. Even though the new theoretical framework was presented in the theory portion of the ambulatory nursing experience, it was minimally integrated into the clinical content. Experience has shown that Orem's theory needs to be more evident in the ambulatory care experience.

Even though the ambulatory nursing clinical experience is unique in its organization and setting, it must fit into the general scheme of the educational program. That is, it must be congruent with the philosophy, curriculum objectives, and nursing theory that guide the whole program. In her book, Nursing Theory: Analysis, Application, Evaluation, Stevens (1984:147) comments as follows:

> the student in a basic nursing program . . . learns best under a single theoretical model. Use of a single model enables the student to integrate knowledge from diverse areas of study and facilitates her induction into the nursing milieu and the nursing ethos.

Orem's Self-Care Deficit Theory of Nursing is the theoretical model for the Long Beach City College vocational nursing program as well as the conceptual base for the Major Applied Research Project. Orem's theory is a general theory of nursing. It is a descriptive explanation of nursing's human foundations and nursing's actions. The theory has three related parts: a theory of self-care deficit, a theory of self-care, and a theory of nursing system. Orem believes that persons will meet their own universal self-care needs if they can. If they are ill or injured, they have self-care deficits and need nursing care. The nurse's major roles are to assist dependent or incapacitated clients to meet their self-care needs and to guide or instruct them so they can regain self-care status as quickly and completely as possible (Orem, 1985, 1991). When the ambulatory care component is redesigned around Orem's Theory of Nursing, then that content will blend with the rest of the educational program. Also, further integration will occur when the objectives for the ambulatory care experience are modified so that they are completely compatible with the program's philosophy and objectives.

The ambulatory care clinical content had emphasized the illness aspect of the wellness-illness continuum. With teaching experience in the ambulatory care facilities, the faculty has suggested that the illness aspect of the experience needs to be reduced and greater emphasis put in the areas of wellness and prevention of illness. Finally, a plan for evaluating the ambulatory care clinical experience must be devised.

Jonas (1986) says that although primary care provides the overall care of clients, the integrating of preventive and curative services is also essential. Primary care may be provided by general practitioners, family practitioners, internists, and nurse practitioners. In this country, primary care physicians also give inpatient care, although in many other countries, inpatient care is given by a separate group of specialists.

Hawkins, Hayes and Aber (1986) describe the primary care function of hospital emergency rooms, walk-in services, and primary care centers. In these facilities, clients can receive care as outpatients, for non-emergency illness such as upper respiratory infections, gastrointestinal upsets and ear infections. Fagin (1992:316) offers another view: "Nurses are . . . the founders of the concept and practice of primary care and still the providers of choice in that area."

Jonas (1986) compares primary care with secondary and tertiary care. Secondary care includes surgery, radiology, cardiology, and similar specialties that are available at community hospitals or offices, ideally through referral from a primary care practitioner. Tertiary care is highly specialized diagnostic, therapeutic, and rehabilitative services, that are available at major medical centers. Federa adds, "When a hospital becomes involved in sponsorship of an HMO, the organization has effectively moved from involvement in acute care or specialty outpatient services to the provision of primary care services in off-site locations" (1983:79).

The need for nurses has increased and waned in increasingly rapid cycles. In a 1987 American Journal of Nursing article, Curran, Minnick, and Moss stated that "In recent years, we have become accustomed to ever-changing messages concerning the demand for nursing services--a shortage in the 1960s, surplus in the mid 1970s, and back in an emerging shortage now." Because of the unpredictability of the need for nurses, as well as changes in health care delivery, it behooves nursing programs to closely monitor the kind of programs they initiate and continue. As stated in the Long Beach City College Catalog (LBCC, 1991-1992:PO 1), the college "is responsive . . . to the diverse needs of the community." In 1987, to meet the increasing need for vocational nurses in ambulatory care facilities, the Vocational Nursing Faculty added a clinical laboratory experience in ambulatory care settings. Now, in 1992, the need for this type of clinical experience should be re-affirmed. Experts are asked to predict answers for the following questions. In 1992 and the future, will ambulatory care continue to grow? Will there continue to be a need for Licensed Vocational Nurses (LVNs) in these facilities? To be responsive to the needs of the Long Beach community, should the LBCC vocational nursing program continue to prepare graduates to work in ambulatory care clinical facilities? When these questions have been answered, then general applicability to other vocational nursing programs' current and future needs for an educational experience in ambulatory care clinical facilities can be considered and the study can serve as a demonstration project for ambulatory nursing education in California.

Purposes and Research Questions

The purposes of this study were to confirm the need for an ambulatory nursing experience, to reconstruct the present Long Beach City College ambulatory care experience, and to develop a plan for evaluating the revised experience.

Four questions were formulated to guide the research for this Major Applied Research Project.

1. What circumstances suggest a need for an ambulatory nursing care clinical experience?
2. Is the Long Beach City College vocational nursing program structured so that it will support the ambulatory care clinical experience?
3. How shall a nursing theory, nursing diagnosis and critical thinking, and wellness and prevention of illness, be integrated into the ambulatory care experience?
4. How shall the ambulatory care clinical experience be evaluated?

Definition of Terms

Ambulatory care. Health care given to clients in outpatient departments, health centers, and physician's offices is collectively labeled ambulatory care. It may include care given in other out-patient facilities such as emergency rooms and home care services (Wilson and Neuhauser, 1985).

Ambulatory care facility. The newer term for the word "clinic" is ambulatory care facility. Health maintenance organizations refrain from calling themselves "clinics," because they wish to avoid the connotation of lower quality, free, health care (Gallego, 1989).

Client. "A person who has a relationship with a health care provider to receive health care services is a client. This person may be well" (Hill and Smith, 1985:2). Client connotes alliance and collaboration, and for many nurses is the preferable term, rather than "patient."

Diagnostic Related Groups (DRGs). The prospective payment system for hospitalization for Medicare clients is called diagnostic related groups. The amount paid depends on the client's medical diagnosis. There are twenty-three diagnostic categories, that consist of 470 specific diagnoses, each with a designated length of stay. The amount of money the hospital receives is fixed on the designated length of stay, no matter how long the client stays in the hospital. If a client can be discharged early, the hospital makes more money. If the client stays in the hospital beyond the allotted time, the hospital loses money (Plomann and Shaffer, 1983; Smith, 1985).

Health Maintenance Organization (HMO). "An organization that provides a defined [health] benefit package for a defined prepaid price to a voluntarily enrolled defined population" is named a health maintenance organization (Federa, 1983:72). In addition, "the HMO assumes some of the financial risk or gain in the provision of health services" (Jonas 1986:167).

Medical model. The medical model is a paradigm that describes medicine as a profession that diagnoses and treats disease (Hamilton, 1992).

Nursing. In 1990 the American Nurses' Association states, "The 'practice of nursing' means the performance of services for compensation in the provision of diagnosis and treatment of human responses to health or illness" (Hamilton, 1992:85).

Nursing diagnosis. "A nursing diagnosis is a clinical judgement about individual, family or community health problems or life processes. Nursing diagnoses provide the basis for selection of nursing interventions to achieve outcomes for which the nurse is accountable" (Carroll-Johnson, 1990:50). This definition was officially adopted by the North American Nursing Diagnosis Association at the Ninth Biennial Conference in March 1990.

Nursing process. The nursing process is a method of organizing and giving nursing care. It includes five steps: assessment, diagnosis, planning, implementation, and evaluation (Iyer, Taptich, and Bernocchi-Losey, 1986). The nursing process "is one of the major guidelines for nursing practice and serves as a foundation for nursing care in health and illness" (Taylor, Lillis, and LeMone, 1989:15).

Orem's Self-Care Theory of Nursing. Orem's theory describes nursing's "legitimate service" (Orem, 1991:71). Orem believes that persons will meet their own universal self-care needs if they can (117). If they are ill or injured, they have self-care deficits (120, 127) and need nursing care (187).

Primary care. A type of health care that is defined as care given by

> an appropriately trained health professional or team [that] provides most of the preventive and curative care for an individual or family over a significant period of time, coordinates any services that must be sought from other health professionals, and integrates and explains the patient's or family's overall health problems and care, giving adequate attention to their psychological and social dimensions (Jonas, 1986:153).

Primary prevention. The first level of illness prevention is defined by Jonas (1986:152-53) as "thwarting disease before it starts." Primary prevention includes "the 'basic seven' personal preventive interventions: exercise promotion, smoking cessation, weight loss, stress management, nutrition counseling, substance abuse control, and personal accident prevention." Primary prevention is contrasted with secondary prevention: screening and early detection, of diseases such as heart disease, cancer, hypertension, and diabetes; and with tertiary prevention: rehabilitation.

Assumptions

For this study, the following assumptions were made:

1. The respondents to each of the three survey instruments will be representative of the general population of Long Beach City College vocational nursing students, Long Beach ambulatory care staff nurses, and California vocational nursing directors.

2. Because of their knowledge and experience, the experts who were interviewed were able to both suggest the current state of ambulatory health care in California, and predict future trends with reasonable accuracy. They were also able to differentiate between the future in five years and the future in ten years.

3. It was possible to devise the appropriate modifications for the current ambulatory care experience, so that the revision could accomplish the purposes of the study.

4. Tyler's (1949) four fundamental curriculum development questions are sufficient to measure the efficacy of the ambulatory care experience.

Limitations

For this study, the following limitations are extant:

1. The panel of faculty and nursing staff experts who analyzed the experience was small. This group could not be enlarged because they were the only people who had experience with, and special knowledge of, the LBCC vocational nursing ambulatory care clinical experience.

2. The content revision parts of the study have specific applicability to schools that utilize Orem's Self-Care Deficit Theory of Nursing and a wellness focus for the ambulatory care component of their total curriculum.

3. The ambulatory care elements of the study are presently applicable only to urban areas of California that have at least one large or several small ambulatory care facilities. California has a much higher percentage of HMOs (Marion, 1990) than most other states. Oregon, Arizona, Colorado, Minnesota, Wisconsin, Maine, and Rhode Island are other states with many HMOs (Marion, 1990). Most states in the middle west and south have very few of these ambulatory care facilities. In areas that presently have only a few ambulatory facilities, ambulatory nursing may be far in the future.

While it is always risky to attempt to plan for the future, controlled change based on sound evaluation is safer than continuing the status quo. An assessment of the past from a review of the literature, advice gathered from experts, summaries of practice patterns from practitioners in the field, and creative input from a dedicated faculty will result in an ambulatory care educational experience for students that will prepare them for the future in health care.

Chapter 2

REVIEW OF THE LITERATURE

The review of the literature had the following five purposes: (1) to examine changes that would predict continuing growth of ambulatory care, (2) to verify that the structure of the LBCC vocational nursing program supports the ambulatory care clinical experience, (3) to provide the foundation for integrating Orem's Self-Care Deficit Theory of Nursing, nursing diagnosis and critical thinking, and wellness and prevention of illness into the ambulatory care clinical experience, (4) to delineate nursing practice in ambulatory care settings, and (5) to derive ways of evaluating the ambulatory care clinical experience.

Changes in the Delivery of Health Care that Support Ambulatory Care Growth

The Effect of Health Maintenance Organizations and Diagnostic Related Groups

Jonas describes the background of a recent innovation in health care delivery, the development of Health Maintenance Organizations (HMOs). On December, 29, 1973 the 93rd Congress made a national commitment to a prepaid health plan with the passage of the Health Maintenance Organization Act of 1973 (Public Law 93-222) (Jonas, 1986). It authorized 325 million dollars over five years for grants and loans to help develop HMOs. This bill includes policies that increased primary care and decreased hospitalization. Although HMOs do include the cost of unlimited hospitalization, they achieve a ten percent to forty percent reduction in enrollee costs by switching "the underlying incentives of the provider from illness-focused hospital-based care toward wellness and ambulatory care" (168). "However, the federal government did not desire or intend to regulate the actual process of health care in HMOs; thus, they provide a major incentive for physician participation" (169).

In January 1980, RN Magazine ("Hospitals Reimbursed") reports that for 383 diagnostic categories an average-cost system, rather than *per diem* rates, would be paid to New Jersey hospitals for Medicare patients. This New Jersey plan was the prototype for a new federal Medicare payment system. The cost of health care had risen from fourteen billion in 1965 to one hundred billion in 1980. Smith explains that the Diagnostic Related Groups (DRGs) system is an attempt to control these spiraling costs; "The federal government (along with state governments) pays more than fifty percent of this national bill for health care, mostly through its Medicare and Medicaid programs. Researchers at Yale University devised the DRG system." They based the system on the "International Classification of Diseases, 9th revision, Clinical Modification (ICD-9-CM)" developed in the 1920s by the World Health Organization. Title VI, Public Law 98-21, the Social Security Amendments of 1983 encodes the DRG system. It went into effect April 20, 1983 (Smith, 1985:38). Luft states that in the past, Medicare had reimbursed hospitals on a retrospective, *per diem* cost basis. Now, that the new prospective Medicare payment system has been inaugurated, "payer behavior [has changed] from that of price takers to price setters" (1987:viii).

In January of 1984, Lee and Sandroff write about major changes in health care. The Medicare payment plan had gone into effect the previous fall. These writers state "The repercussions of the plan [DRGs] will be felt in 1984 and for years to come by everyone in the health-care industry" (26). In May of 1984, Lee, a senior projects editor for RN interviews several people who had experience with the DRG system. Davis, of the Health Care Financing Administration, states there will be "more outpatient surgery, more home health care, more satellite diagnostic centers and more free-standing clinics under DRGs" (73). Keenan, a vice president for finance of a New Jersey hospital asserts, "health-care centers and services independent of hospitals have literally exploded in New Jersey" (73). In a feature in the June 1984 issue of Nursing, ("Seeing the Future") the editors ask

Mauksch, a professor of nursing in Alabama, "What will health care be like in the year 2000?" Mauksch said, "We're already seeing a shift from hospital-based to community-based secondary care. The hospital will eventually become one big intensive care unit, reserved for only the most critically ill. Less seriously ill patients can do as well or even better at home." She also predicts, "a growing number of older and younger patients. By the year 2000, one third of the population will be over sixty-four or under sixteen" (17-18).

In August 1984, Studin, Coile and Strum examine the future of hospital-based nursing. They state that "the hospital segment of the health industry is mature, and will shrink, but other components . . . will expand" (65). In hospitals the nurse will have a major new role as information manager. With wellness and health promotion programs being developed, nurses will be transferred into primary care and education activities.

Jonas (1986) predicts that HMO enrollment would grow from seventeen million in 1984 to forty million by 1990. Selbert (1987) predicts a rise in enrollment to almost forty-nine million in 1990 and quotes the marketing research firm of Frost and Sullivan, who say "HMOs are the 'preeminent factor' for change in U. S. health care delivery" (3). The 1990 HMO Edition of the Marion Merrell Dow Managed Care Digest predicts a 1990 enrollment of almost thirty-seven million. The 1991 Edition of the Managed Care Digest, HMO Edition, reports that the actual 1990 enrollment in HMOs was nearly thirty-nine million. The actual growth in the number of HMOs, the enrollment in HMOs, the United States Census, and the percentage of the population enrolled in HMOs is shown in the Table 1 on page 15. The HMO figures are used with permission from Marion Merrell Dow, with the exception of the 1976 number of HMOs and enrollment that is taken from Rosenblum, Miree, and Tolpin (1989), and the 1982 number of HMOs that are from Federa (1983). The 1980 and 1990 census values are also from Federa (1983). Other census values and the percentage of the population enrolled in HMOs were calculated. The predicted values in Table 2, on page 15 are from Marion Merrell Dow and are used with permission.

Table 1

HMO GROWTH 1976-1990

Year	Number of HMOs	HMO Enrollment (thousands)	U. S. Census (thousands)	Percent of Population
1976	174	6,000		
1982	243	10,300	230,427	4.5 %
1984	385	16,784	233,699	7.2 %
1985	490	22,660	235,335	9.6 %
1986	632	26,559	236,970	11.2 %
1987	707	31,024	238,606	13.0 %
1988	659	33,715	240,242	14.0 %
1989	623	35,031	241,877	14.5 %
1990	614	38,707	243,513	15.9 %

Data source, SMG Marketing Group Inc. © 1991 for Marion Merrell Dow Managed Care Digest, HMO Edition

Table 2

HMO GROWTH PROJECTIONS 1991-1994

Year	Number of HMOs	HMO Enrollment (thousands)	U. S. Census (thousands)	Percent of Population
1991	603	40,167	245,149	16.4 %
1992	591	43,970	246,784	17.8 %
1993	579	48,218	248,420	19.4 %
1994	568	53,152	250,056	21.3 %

Data source, SMG Marketing Group Inc © 1990 for Marion Merrell Dow Managed Care Digest, HMO Edition

In September of 1984, the Wall Street Journal in the "Business Bulletin" publishes a trend report that indicates hospital use has dropped as health insurance plans try to decrease costs. Free standing clinics are proliferating as employers change insurance benefits to avoid hospital care. Rosenblum, Miree, and Tolpin (1989:74) analyze the effects of HMOs on hospital usage and ambulatory care. They declare, "Most importantly, the inverse relationship between HMO penetration and hospital usage lays the groundwork for a refocused emphasis on ambulatory care and preventive services." They suggest that HMOs should take the opportunity to develop a sensible health care system with a foundation of ambulatory care, and should use hospital care in a secondary or tertiary position. Selbert (1987) notes that the Health Care Financing Administration reports that "Health care spending is shifting from hospitals to private doctors, HMOs, and nursing homes. Currently, hospital admissions are at a 16-year low for patients under 65" (2).

Roemer (1986) reports that the number of ambulatory care facilities has increased almost steadily over the last fifty years. These arrangements are "slowly replacing the individual doctor's office as the setting in which people receive medical services in the United States" (39). "The organizing trends that have long characterized hospital care are coming now to characterize ambulatory care" (47). Kovner (1990:256) indicates, "Many studies have found that HMOs, particularly group and staff models, reduce hospital use and total costs."

Griffith (1985) writes about the role of nurses as preferred providers in ambulatory care settings. She observes that nurses already have a growing role in Health Maintenance Organizations, and that Preferred Provider Organizations (PPOs) offer another opportunity for nurses. These organizations are a combination of fee-for-service and prospective payment systems. The provider (doctor or nurse) becomes preferred by signing a contract with a purchaser (health insurance companies, hospitals, physicians, corporations, or labor unions) to deliver services at an agreed-upon, usually discounted price. According to

Griffith, "Study after study has proved that nurses can provide many primary care services as well as and less expensively than physicians" (539). After reviewing the situation in several states across the country, she recommends that nurses become entrepreneurs and avail themselves of this "golden opportunity" and "ensure their place in the mainstream of the new health care system" (542).

Anderson (1989:59) writes about economic opportunity for nurses. He quotes Geffers, regional director of ambulatory nursing at Family Health Plan in Long Beach, CA, who states, "Ambulatory care is going to keep patients out of hospitals [and] that's going to force dollars and jobs into the ambulatory/home health mode." Moore and Geving (1990:21) assert, "Although sixty-eight percent of all nurses now practice in hospital settings, predictions indicate that within the next ten years, sixty percent of all nurses will practice in ambulatory care settings." These statistics are from the findings of the Secretary's Commission on Nursing. Nornhold (1990) predicts that "more job opportunities will open up for nurses to work in ambulatory health care. Hospitals . . . will want nurses who are technically proficient but who can also develop a quick rapport with patients and do effective patient teaching" (37).

Gray (1992) reports that nursing centers are gaining ground and predicts a bright future for these facilities. Nursing centers are entirely nurse managed and are staffed with nurses who are providers of primary care. A study released by the National League for Nursing shows that many of the first nursing centers were established to serve the urban poor. Now, the centers are becoming accepted by middle class out-of-pocket consumers and third party payers, and are becoming models for healthcare reform.

The American Journal of Nursing gives further information on nursing centers ("Community Nursing" 1992). There are an estimated 250 centers that served at least 118,000 Americans in 1990. A nursing center, to meet the NLN definition, must have a nurse in the chief management position, with accountability and responsibility for client care remaining with the nurses. The clients must have direct access to the nurses. The services offered included the whole range of primary care: physicals, check-ups, immunization and infusion therapy, prenatal and perinatal care, well-baby care, well-woman care, screening, education or counseling, consultation, and home health care. The costs averaged out at about seventy-eight dollars per visit and were paid for by private insurance, Medicare and Medicaid, and out of pocket charges. Thirteen percent of the charges were uncompensated. Charges to clients were as low as six dollars for vaccinations, thirty dollars for a complete check-up, and fourteen hundred dollars for the childbirth package. Over half of the nurses had masters or baccalaureate degrees and the staff salaries averaged over thirty thousand dollars. Most of the centers made profits of fifteen to forty thousand dollars.

In a news article, RN, a nursing journal, relates information about a new NLN report ("Nursing Centers," July 1992). In the report, "Nursing Centers: A Promising New Trend in American Health Care," NLN encourages Congressional support for a bill providing increased Medicaid coverage for nurses with advanced preparation. About half of the centers are affiliated with a school of nursing or other public agency and about half are freestanding. The NLN says that these centers have high retention rates for nurses because of greater practice autonomy.

Fagin (1992) reveals the history of nursing's involvement in primary care. The public health movement and the visiting nurse associations are the best example of nursing's tradition as primary caregivers. Lillian Wald was among the pioneers in the public health movement. She founded the Henry Street Settlement in 1893 (Grippando and Mitchell 1989). Fagin goes on to relate Wald's prowess as a negotiator and statistician. She persuaded the Metropolitan Life Insurance Company to pay fifty cents per visit for policyholders by proving that her nurses were able to cost-effectively lower mortality rates. Several things moved primary care away from nursing. Communicable diseases came under control, physicians began to replace nurses as primary caregivers, and the focus of health care delivery and childbirth shifted from the home to hospitals. Increasing regulations stymied nursing practice and federal payment systems such as Medicare would not reimburse nursing services. Today, "the same medical biases that led to restrictions on primary care nursing decades ago have blossomed into serious problems of inadequate access, cost overruns, and second-rate quality" (316). Fagin asserts that the cure of disease alone is not affordable. Support must be provided so that "prevention, nutrition, healthy lifestyles, ongoing care and myriad other concerns . . . will lower costs and improve the overall quality of health care in the nation" (317). Fagin concludes by challenging nurses to build coalitions with America's communities, legislatures, and Congress. The goal must be to "rebuild the system to accommodate delivery of the kinds of services consumers want and need. . . . [without] compromising on the core values of nursing, which are so necessary to solving the problems in health [care] today" (317).

The 1990-91 Edition of Hospital Statistics, published by the American Hospital Association, relates, "Trends in the utilization of hospital services have been varied. Declines in inpatient use and simultaneous growth in outpatient care depict what is perhaps the most significant change in health care delivery in the past ten years" (xxxvi). The 1991-92 Edition indicates that the trends have continued. "Since 1980, inpatient days have fallen a total of fifteen percent after peaking at 278 million in 1981." "In 1990 community hospitals reported 301 million outpatient visits, up 5.5 percent from 1989 (xi). "There has been a surge in the number and types of outpatient services available. In 1985, more than half of all community hospitals offered outpatient departments to their communities. Just five years later, more than three-quarters of all community hospitals have an outpatient department" (xiii). The data, comparing community hospital inpatient days versus outpatient visits from 1979 to 1989 are found in Table 3, on page 20.

Boehm and Murray (1990) analyze healthcare's future. They describe the inpatient sector of healthcare as mature, with little growth expected. The outpatient area, however, is now becoming the center for growth with the focus on prevention, diagnosis, and treatment. The hospital of the future will be smaller and will resemble a critical-care unit.

Table 3

Community Hospital Inpatient Days
Versus Outpatient Visits, 1979-89

Year	Hospital Days (thousands)	Outpatient Visits (thousands)
1979	265,600	200,000
1980	271,900	203,300
1981	278,100	203,100
1982	278,100	206,000
1983	271,900	209,400
1984	256,300	212,500
1985	237,500	218,800
1986	229,700	231,300
1987	228,100	243,800
1988	228,100	268,800
1989	226,600	287,500
1990	227,100	301,000

Shaded area indicates period when outpatient visits were greater than inpatient days.

Note: U. S. Department of Health and Human Services data on outpatient visits from 1984-1988 ranged from 41,000 to 72,900 visits higher than the American Hospital Association statistics, above.

These authors believe that these changes are not "just a temporary adaptation to the reimbursement environment but a profound change to be recognized" (24).

Shenot (1991) describes the business of freestanding outpatient surgery centers. She says that surgery cases in these centers have increased from under 500,000 in 1983 to over 2,500,000 in 1991. The number of centers has increased from 250 to over 2,500 in the same period. These centers are not all highly profitable, but some of them, that emphasize attentiveness to surgeons and patients, have become a "thriving industry."

Groah and Howery (1992) predict that the trend toward construction of freestanding outpatient centers will be discontinued. Hospitals will begin building ambulatory surgical facilities that have a separate entrance, waiting rooms, and recovery area. However, the outpatient center will be situated so that it can use the hospital's main operating rooms.

Although managed care organizations have had a steady growth, Kenkel (1990) reports that they had a period in 1988 and 1989 when two-thirds of HMOs lost money. Preferred Provider Organizations (PPOs) had challenged the HMOs and have taken a large share of their market. However, most of the managed care organizations were profitable in 1989. Kenkel includes the following statistics in his report. "Sixty-eight million people or one-fourth of all Americans receive care through a managed-care operation. Of that number, nearly thirty-five million are enrolled in more than six hundred HMOs. Another thirty-three million are estimated to be participants in seven hundred PPOs nationwide" (82). In the March 20, 1992, issue of Hospitals, the editors publish predictions by a panel of twenty-eight financial experts assembled by the Healthcare Financial Management Association ("Panel Predicts"). The experts indicated that the operating margin of hospitals was 2.7 percent in 1990 and will be only 2 percent in 1995. However, the outpatient revenue that was 22.5 percent in 1990, will go up to 30.3 percent in 1995.

Shenot (1992) describes the merger of two outpatient care companies. These companies provide outpatient surgery and home infusion services and both businesses have responded to the drive to contain health-care costs by offering savings relative to hospitals. Shenot suggests that the combining of the companies might indicate that this industry is maturing and that increased competition might push down profit margins. Also, large health maintenance organizations and other managed care providers are seeking discounted care from the specialist companies. Some analysts speculate that within a few years, insurers may begin paying providers a fixed sum for full treatment of a disease. This would mean that companies that have integrated all types of services could offer the client everything needed for treatment and would be in the best position to compete. On the long term, industry analysts hail the merger and predict a positive long-term view for these types of health care providers.

The Effect of the Aging American Population

An additional major change that affects ambulatory health care is the aging of the American population. Studin, Colle, and Strum (1984) predict that the numbers of people over sixty-five will increase by twenty-four percent in the 1980s, and that eighty-one percent of people over sixty-five have chronic illnesses. Chronic illnesses usually demand more ambulatory care than acute illnesses. In 1985, Daria and Moran made predictions for nursing during the 90s, and they, too, comment on aging. They state that the Census Bureau estimates that more than a quarter of the population will be over age sixty-five. The need for gerontologic nurses will increase by 400 percent and most of these nurses will work outside the hospital. Care will be given in freestanding specialized health care centers, in rehabilitation centers, and in client's homes. Attempts to cut costs will continue.

Daria and Moran (1985) also state that "approximately $1 billion is spent on health care per day. That figure represents nearly 11% of the gross national product and ranks fourth on the list of federal expenses" (26). Ambulatory care is one way of cutting these spiraling costs. Daria and Moran continue that nursing curriculum will have to be revised to accommodate the need for more nurses to care for the aged. "Skills in differential assessment will be absolutely indispensable both in and out of the hospital" (29). Schools must prepare students both technically and psychologically to care for the elderly. In 1990, Nornhold also predicts an increasing number of aged. "By the year 2000, 15% of the U. S. population will be sixty-five or older, more than 3 million will be eighty-five or older, and 100,000 will be one hundred or older" (40).

The Effect of the Nursing Jobs Market

Another important change that affects both ambulatory health care and the job outlook for licensed vocational nurses is the roller-coaster of demand for nurses. In 1985, Ballman suggests that "the current shortage in available hospital-based nursing jobs is not cause for teeth-gnashing in health care circles. Industry experts believe this is a temporary condition and, indeed, helps shift the focus to other practice options" (181). History shows that the shortage was temporary. By April of 1987, Curren, Minnick, and Moss report on a survey supported by the American Organization of Nurse Executives, that 13.6 percent of the total number of registered nurse positions are vacant. The rate is twice that of September 1985, when an American Hospital Association survey showed a vacancy rate of 6.3 percent. Within two years a serious shortage of nurses had become evident. Future Scan (Seibert, 1987) reports the same figures and explains that nurses were leaving nursing because of low salaries, high pressure and poor hours. College students were not choosing nursing but were entering business and other professions. Scherer (1987), writing in the American Journal of Nursing, titled her article, "When every day is Saturday: The Shortage," and described nurses as being demoralized, angry, and just plain worn out, because of the acute shortage of nurses. In 1988, the editors of Nursing 88 ("Nursing Shortage") reported that the shortage was continuing, but salaries were up and hiring of licensed practical nurses/licensed vocational nurses (LPNs/LVNs) and nursing assistants had also increased.

In January of 1990, Nornhold wrote "90 Predictions for the 90s." She foresees that the nursing shortage will continue and all-RN staffing "will become a dead issue" (36). She believes, "For too long LPNs [LVNs] have been an untapped resource, overlooked and ignored by the health care system. During the nineties their skills and talents will be used more effectively" (36). In 1992 the shortage is waning in some areas, at least temporarily. Hammers (1992) reports that today's job outlook differs vastly from the situation just two years ago. Then, the average vacancy rate in California was twelve percent. Now, the rates are two to six percent. The recession is an important reason for the lowered vacancy rate. When spouses lose their jobs, nurses take full time positions. Hospital mergers and hiring freezes have also played an important role in ending the nursing shortage. However, experts predict that the job market for nurses will improve as the economy recovers. The California Employment Development Department expects occupations in the health field to increase thirty-nine percent by the year 2000.

In her book, 100 Best Job$ for the 1990s & Beyond, Kleiman examines the employment outlook for LPNs [LVNs]. She describes the job as requiring a background in nursing, pharmacology, computation, computer literacy, and technical skills. The practical nurse must be adaptable, energetic, able to get along and communicate with people. In doctors offices, health maintenance organizations, and clinics, clerical and record keeping skills are essential. The salary was $23,152 in 1991 and Kleiman predicts that it will be $42,000 by the year 2000. She suggests that the most jobs will be found in hospitals and nursing homes, but employment will grow rapidly in physicians' offices, walk-in clinics, and health maintenance organizations. Kleiman advises that practical (vocational) nursing is a good entry-level job into the health care field and one that should lead to registered nursing, a much higher paying occupation.

Structure for the Vocational Nursing Program to Support an Ambulatory Care Experience

Key Parts of Accreditation Guidelines

Bevis (1989) is the author of a seminal book about nursing curriculum development, published by the National League for Nursing. This book contains the criteria for NLN accreditation for schools of nursing. Bevis explains that these criteria are based on the Tyler model (1949). The fundamental elements of the criteria are a philosophy and a conceptual framework. Based on these elements, behavioral objectives are developed for the program, courses, units, and learning activities. Then the faculty chooses content that will help the students to meet the objectives. Finally, evaluation tools are developed to measure the learning described in the objectives. Bevis (1987:31) explains that accreditation requirements were powerful forces in establishing the "Tyler-type behaviorist technical model as *the* model for nursing." She explains two additional forces that were influential. The first was her book on curriculum development; the second was Mager's (1962) book, Preparing Instructional Objectives. Bevis (1989) describes some content ideas that are less concrete and are difficult to reduce to behavioral objectives. These include recognizing significance, thinking critically, finding meanings, using intuition, gaining insights, seeing patterns, being caring and concerned, and making moral and ethical commitments. She suggests that these kinds of content are essential for higher degree programs. However, she confirms the usefulness of the Tyler/Bevis model for generic nursing programs. All these programs have a technical component, because some functions of nursing require safe performance of technical skills and the Tyler model works well for developing that aspect of the curriculum.

Philosophy

Kintgen-Andrews (1988:437) writes about the philosophy of a school of nursing as a foundation for the curriculum. She describes the purpose of a philosophy as an instrument that directs the whole curriculum process and affects all of the students' learning experiences. A philosophy gives a clear statement of the values of a faculty. These values, beliefs, and goals provide the rationale for choices and priorities in the curriculum. The Long Beach City College Vocational Nursing Program Philosophy is found in Appendix H, on page 277. The VN Philosophy addresses the beliefs of the faculty related to five major topics: individuals, society, health, nursing, and vocational nursing education. The individual is seen as a self-directed being whose values and behavior can be changed through education. Society is described as having responsibility for disease prevention activities and care of those who are unable to care for themselves. Both individuals and society are responsible for the preservation of the environment. Health is a state wherein individuals are structurally and functionally whole. Health should be maintained and illness prevented, so ambulatory care is becoming a preferred method of health care delivery. However, acute and long-term care will continue to be in demand because of technological improvements in health care and increasing longevity of the population. Nursing care focuses on client self-care to resolve physical, psychosocial, and spiritual needs. The mechanism for delivering nursing care is the nursing process. Vocational nursing education is the preparation of beginning level nurses who have the knowledge and skills to care for stable clients of all ages. Instructors are responsible for devising the learning environment. Students are responsible for their own learning and nursing practice.

Essential Components of a Curriculum

Subject. Bevis writes about the process of curriculum building in nursing. She lists three essential components of a curriculum: the subject, the setting, and the student. The "subject" is the conceptual framework or the description of the way the faculty wants students to practice nursing activities. Bevis believes a nursing theory such as Orem's Self-Care Theory of Nursing provides a "tightly knit, highly focused group of concepts, hypotheses, postulates and principles that are woven together" (1989:100) so that one major idea can be used as a conceptual framework for a curriculum. The structure for the whole LBCC VN curriculum is based on the conceptual framework that nursing is helping clients care for their health needs for themselves (Orem, 1991). The LBCC Vocational Nursing Curriculum Guide (1992) states that vocational nursing students are persons who are at the first level of nursing education. All settings where health care activities are taking place are appropriate learning sites for nursing education. Thus, the structure of the clinical experience using ambulatory care facilities follows the structure of the whole vocational nursing curriculum, with the exception that the ambulatory nursing care takes place in specific settings: ambulatory care facilities.

Settings. Drew (1990:149) writes about the history, evolution, and survival of health maintenance organizations. To answer questions about the place of nursing in HMOs she replies that, "the HMO model of health care delivery is consistent with the health promotion and holistic philosophies of the nursing profession, and it provides nurses with opportunities for health teaching, primary care interventions, long-range health planning, and case management." Therefore, she believes nursing does have an important place in HMOs.

Reilly and Oermann (1985:369) discuss the changes that are evolving in the clinical field for nursing. They feel that the DRG system of prospective payment will have a great impact on the settings where student nurses learn to practice. They believe that there will be movement of this activity from hospitals to the community and its agencies. "Ambulatory care facilities will increase and provide experience in monitoring health status, participation with diagnostic and therapeutic measures, and fostering self-help capacities of clients and their families." In this type of setting students can learn to optimize time spent with clients, hone their assessment skills, and increase the proficiency of their nursing interventions, particularly teaching and counseling. They can also learn to adjust their own understanding of health practices to the life styles, values, and priorities of the clients.

Students. The student in the LBCC vocational nursing program learns the role of a nurse at the beginning level of nursing. Bevis (1989) quotes the American Nurses' Association that describes professional nursing roles as "care, cure, and coordination." Prevention of disease and maintenance of health are listed as a coordination role, along with roles of health educator, group leader, and decision maker. These roles of the professional nurse must be contrasted with the role of the vocational nurse.

The California Vocational Nursing Practice Act with Rules and Regulations, issued by the Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE, 1987:92) states, "The Legislature hereby declares the practice of licensed vocational nursing to be a profession" (§2840.5 (a)). However, the law also states that vocational nursing is "practiced under the direction of a licensed physician, or registered professional nurse" (§ 2859). Haynes 1992 a), the Executive Officer of the BVNPTE, cautions that although the roles of the vocational nurse are similar in many ways to the basic roles of the registered nurse still the actions of the vocational nurse must always be under the direction of the registered nurse. Anderson, nursing consultant for the BVNPTE, (1992) suggests that schools may (and should) teach students to perform above the minimum standards of the practice act but she warns that students should clearly understand the vocational nursing scope of practice so that they do not inadvertently go beyond the allowances of the law. The Council of Practical Nursing Programs of the National League for Nursing (NLN) publishes a booklet, Characteristics of Vocational Nursing Education. In this document the Council states, "students are prepared to provide care to patients whose conditions are considered to be stable" (1985:4). In 1989, the Council of Practical Nursing Programs issues another booklet, Entry-Level Competencies of Graduates of Educational Programs in Practical Nursing. In this publication the Council declares, "The primary role of the practical/vocational nurse is to provide nursing care for clients in structured health care settings who are experiencing common, well-defined health problems" (1989:1). The National Council Licensure Examination for Practical Nurses (NCLEX-PN) in the test plan for the licensure examination, describes the test plan as a tool to determine the student's ability to meet the needs of clients with commonly occurring health problems having predictable outcomes (National Council 1989). The "LBCC VN Program Philosophy" summarizes the role of the vocational nurse by declaring, "Vocational nursing education is the preparation of beginning level nurses who have the knowledge and skills to care for stable clients . . . under the direction of a licensed physician, or registered professional nurse" (Appendix H, on page 277).

Structure of the Curriculum at LBCC

Curriculum objectives. The statement of Curriculum Objectives (Appendix H, on page 279) outlines the knowledge, skills, and attitudes that are expected of the LBCC vocational nursing graduate. These objectives describe the final student outcomes, to which the LBCC VN faculty are committed. They are summarized in the following statements. Students will communicate basic information and use the five step nursing process to apply nursing principles in caring for culturally and developmentally diverse, stable clients with common health problems. They will safely and ethically practice basic nursing skills, give medications, teach self-care to clients, and practice as team members and team leaders.

Credit Course Outline. The Long Beach City College Vocational Nursing Faculty writes the Credit Course Outline (1989), Vocational Nursing, Developmental Levels: Older Adult. The ambulatory care clinical experience is a part of this course. This document has been approved by the Curriculum Committee and the Board of Trustees of the Long Beach Community College District. The first two course outcomes/objectives support the use of ambulatory care clinical facilities as learning sites for vocational nursing students. The first requires that students use knowledge of common health problems to give care to older adults. The second requires that the students function with less instructor supervision and improve in ability to assess physical problems, self-care deficits, nutritional and mobility needs, and problems with multi-drug therapy in older adults in the ambulatory care setting.

The Credit Course Outline (1989) reveals the theory content of the course. Part four describes the theory that is implemented during the ambulatory care clinical experience: 4. Promoting wellness and self-care that involves the following:

a. Physical assessment techniques
b. Self-care assessment techniques
c. Universal self-care requisites in the elderly
d. Addressing care needs using the nursing process.

Another important section of this official college document is the statement verifying the college level critical thinking tasks/assignments. Regulations in Title V of the Education Code (California 1992, §55002) require degree applicable courses to include critical thinking tasks and assignments. This requirement is met by the following statement in the Credit Course Outline (1989:4): "Critical thinking and problem solving will be learned, practiced, and evaluated in the classroom and hospital or ambulatory care setting while students are giving direct client care. The adaptation of nursing care principles is required in order that individualized nursing care, appropriate for each patient/client, can be given."

Theory text. The text used for the theory portion of VN Developmental Levels: Older Adult is Health Assessment of the Older Adult, by Eliopoulos (1990:v, vi). In the preface to her book, Eliopoulos summarizes the need for assessment skills in the first two sentences. "Astute assessment skills are prerequisites for competent nursing practice. A sound assessment provides the foundation for individualized care planning and delivery." The book is organized primarily by body systems but it also includes assessment of social function, mental status, nutrition, sexuality, and functional independence. The objectives of the book are to help the reader conduct a basic assessment of the older adult, understand the relationships between physical, mental, and social functioning, and to understand the assessments of other health professionals. Eliopoulos describes assessment as an interdependent part of the nursing process. The purpose of assessment is to "identify nursing diagnoses that warrant nursing actions" (vi), and the text assists the students to accomplish that task. The class schedule with the textbook assignments and ambulatory care clinical correlations is in Appendix I, on page 283.

Clinical text. The text used for the clinical portion of VN Developmental Levels: Older Adult is Care Planning Pocket Guide: A Nursing Diagnosis Approach, by Lederer, Marculescu, Mocnik, and Seaby (1991). This handbook-type text is used to assist students in making nursing diagnoses under the supervision of the registered nurse. This text is used with the LBCC VN Self-Care Taxonomy of Nursing Diagnoses, Related to Orem's Theory of Nursing, that is found in Appendix H, on page 280.

Nursing Process

Reilly and Oermann (1985:42) affirm that nurses are now "seeing the patient through their own eyes," and this is implemented through the nursing process. The nursing process is "now acknowledged as the phenomenon of nursing practice" (43). During the eighties, a part of the nursing process, nursing diagnosis, has become a major concern of practitioners. "The categorization of health problems into nursing diagnoses is the most significant component of the nursing process, for it provides the focus for determining goals of care, the derivation of an appropriate realistic plan of care, the selection and use of pertinent nursing actions of intervention, and the evaluative judgments pertinent to the client's progress toward goal attainment" (46).

Self-directed Learning

In all of the courses in the vocational nursing program, except the ambulatory care clinical experience, direct instructor supervision is provided. The ambulatory care clinical experience is unique in that the teacher only sees the students once a week. During the remainder of the experience, the students must independently meet the behavioral objectives under the supervision of the agency staff nurses. Merriam and Caffarella (1991:45) write about learning in adulthood and clarify the nature of self-directed learning. They suggest that self-directed learning is a form of study in which the learner plans, implements, and evaluates his or her own learning experiences. These authors list Tough's thirteen steps in the process of independent learning and explain that these steps represent key decision making points in this process.

1. Deciding what detailed knowledge and skill to learn
2. Deciding the specific activities, methods, resources, or equipment for learning
3. Deciding where to learn
4. Setting specific deadlines or intermediate targets
5. Deciding when to begin a learning episode
6. Deciding when to begin a learning episode

7. Estimating the current level of one's knowledge and skill or one's progress in gaining the desired knowledge and skill
8. Detecting any factor that has been hindering learning or discovering inefficient aspects of the current procedures
9. Obtaining the desired resources or equipment or reaching the desired place or resource
10. Preparing or adapting a room (or certain furniture or equipment) for learning or arranging certain other physical conditions in preparation for learning
11. Saving or obtaining the money necessary for the use of certain human or nonhuman resources
12. Finding time for the learning
13. Taking steps to increase the motivation for certain learning episodes

Only part of this scheme is extant in the ambulatory care learning experience. The first three steps have been done for the students and number eleven is not applicable. Numbers four and thirteen are shared between the student and the supervising teacher.

Merriam and Caffarella (1991) summarize learning as a self-directed activity by combining Tough's ideas of linear learning with the notions of later writers, who feel self-directed learning happens by trial and error. Mirriam and Caffarella suggest that both chance and planning are part of the process. The proportion of each depends on the learner. His or her motivation, circumstances, and the ability to carry out the learning activities and knowledge and experience of the content each influence the learning experience and the continuing interaction of these variables will influence further independent learning.

Mitchell (1990) describes her view of self-directed learning as nontraditional education. She asserts that faculties in nontraditional education use adult learning theories and combine conceptual study with actual work that demonstrates the practical application of theory. She states that research has shown that students who learn in this way retain knowledge more than fifty percent better than those who learn by conventional methods. Mitchell believes nurse educators should "meet students needs by developing different kinds of educational models along an instructional assessment continuum" (189). She exhorts nurse educators to "seize the opportunity to adapt to a changed society" (190) and provide a future oriented educational experience for our students.

Setting Up the Clinical Experience

Hawkins (1981) explains how clinical experiences should be set up for collegiate nursing education. She suggests that the first step in the selecting a clinical agency is assessment of the need for the agency, based on the programmatic outcomes to be accomplished and the curriculum plan for the program. The behavioral objectives for the clinical experience tell all the involved persons why the agency is being utilized within the context of the program. There must be congruence between agency philosophy and educational program philosophy related to the use of student time and student supervision. Also, serious consideration must be given to the constraints of distance from the school; competition with other schools for the agency's facilities; census statistics; staffing patterns; physical facilities including dining and parking for the students; client rights for safe, expedient care; and student rights to have an efficient and profitable learning experience. Other criteria include a contract between the agency and the school, accreditation of the agency, role of the faculty person in the agency, and planning and evaluation between faculty and agency staff.

The planning phase between the school and the agency must include plans for faculty and staff orientation. The arrangements that are made for the students' experience need to be put in writing so that all involved persons are informed of the specific agreements. At the beginning of the implementation phase, the students are oriented. Then, the faculty must continually assess the attainment of clinical objectives and make whatever adjustments are necessary and possible to maximize the learning experiences. Members of the faculty may need to act in several roles during a clinical experience. Not only are they responsible for student instruction but, they may also be a role model for students, a support for the growth of clinical expertise of agency staff members, and change agents to help resolve problems with nursing care given by staff. During implementation, all problems should be discussed as they arise, so that there is no build up of distress about student or agency performance.

The evaluation phase begins with a meeting between the assigned faculty and agency personnel. If possible this meeting should include staff members who are in direct contact with students. Strengths and weaknesses of the experience should be shared openly so that plans for resolution of any identified problems can be made. The faculty should then meet as a group to evaluate the agencies used and make preliminary plans for the next use of the agency.

The Clinical Laboratory

Infante (1985:5) describes the clinical laboratory in nursing education. She states the purpose of the clinical laboratory as follows: "a place for students to learn—learn to transfer knowledge already acquired to practical, dynamic situations." Infante describes the same Tyler/Bevis behavioral technical model as was outlined by Bevis (1989). However, Infante makes a special point of discussing the use of the conceptual framework in the clinical laboratory. She feels that, in some cases, the conceptual framework is carefully used in the classroom, yet in the clinical laboratory it is not evident. She asserts, "the consistent use of the conceptual framework is important. The language and the concepts should permeate all steps in the teaching/learning process" (76).

Infante (1985) suggests that in the clinical laboratory, the teacher guides and facilitates student learning, s/he does not teach. The teaching should have been done in the campus laboratory or the classroom, before the use of the clinical setting. Infante lists the essential elements of the clinical laboratory.

1. Opportunity for client contact
2. Objectives for activities
3. Competent guidance
4. Individuation of activities
5. Practice for skill learning, both motor and intellectual
6. Encouragement of critical thinking
7. Opportunity for problem solving
8. Opportunity for observation

9. Opportunity for experimentation
10. Development of professional judgment or decision making
11. Encouragement of creative abilities
12. Provision for transfer of knowledge
13. Participation in integrative activities
14. Use of the team concept (1985:27).

She elaborates about each of these essential elements, but suggests for undergraduate students, teachers should recognize that the clinical laboratory is a place for students to practice what they have already learned. She feels that students should be assigned to learning activities, not to clients.

Reilly and Oermann (1985) refer to a nursing clinical laboratory as a clinical field. They characterize clinical practice in a nursing program as a cognitive activity. Although there are many "psychomotor and affective skills, the underlying activities are problem-solving and decision-making skills relative to clinical judgments" (18). They suggest that "learning behavior is often an internal process which may be inferred from behavior change rather than be primarily dependent upon observation" (19-20). A meaningful educational experience is one that prepares the learner to manage future similar circumstances. Experiential learning is the essence of clinical practice.

The structural elements of a program that will support an ambulatory care experience have been reviewed. These materials are related to program philosophy, curriculum outcomes, nursing theory and process, students at the vocational level of nursing, state vocational nursing practice act, state education code mandates, college curriculum requirements, textbooks, self-directed learning, clinical setting, and clinical agency relationships. Suggestions and exhortations from the literature have been summarized and compared with LBCC program elements, so that the faculty can evaluate and make needed changes in the curriculum.

Orem's Self-Care Deficit Theory of Nursing

The third research question in this study addresses the way specific concepts can be integrated into the ambulatory care experience. One of the concepts to be integrated is a nursing theory. A major reason for revising the ambulatory care clinical experience is that the VN faculty had adopted Orem's Self-Care Deficit Theory of Nursing (SCDTN) (1991) as the conceptual framework for the LBCC VN program but had not sufficiently integrated the theory into the ambulatory care clinical experience. To provide a foundation for the needed revisions, the literature related to Orem's SCDTN was reviewed.

Nursing Theory Development

Deloughery (1991:49) relates nursing theories to the nursing process. She suggests that nursing theories

> provide a framework that defines the nurse's role, the client, and the meaning of health. . . . Nursing models can direct each component of nursing practice and assist nurses to: collect, organize, and classify data; understand, analyze, and interpret the client's health situation; plan, implement, and evaluate nursing care; [and] explain nursing actions.

Deloughery presents a chronology of theory development in nursing. She explains that in nursing, there are many different interpretations of the terms: conceptual model, conceptual framework, theoretical model, theoretical framework, and theory. Different authors use these terms interchangeably. Deloughery suggests that the terms represent an evolutionary process, with a theory being the most highly developed. Deloughery defines a theory as "a set of clearly defined, interrelated concepts and relational statements that systematically represent a portion of reality" (1991:51).

Deloughery (1991) explains that Florence Nightingale was the first nurse theorist. Her book Notes on Nursing describes her philosophy and is a foundation from which other theorists work. Modern theory development began in the 1950s with Peplau's description of nursing as an interpersonal process between nurse and patient. A few doctoral programs in nursing began in the 1950s but most nurses still received doctoral education in the behavioral sciences until the 1980s. During the 1960s a few of these nurses began to develop nursing theories. Abdella, Orlando, and Henderson are prominent names among the early theorists. By the early 1970s nurses had arrived at consensus about the nursing concepts: nurse, nursing, health, client/patient, individual, society, and environment.

In 1971 Orem began writing her book that defined nursing as the facilitation of self-care for a client. In 1973, NLN began requiring conceptual frameworks for accreditation of nursing education programs. During the 1970s "Orem, King, Roy and Rogers, have published more explicit definitions of their concepts and relational statements" (Deloughery, 1991:61). They have tried to relate the theories to practice or have reported research studies based on the theories. Since 1970, ten nurse theorists have published books that explained their theories.

In 1990, Zylinski did a study comparing the curricula of vocational nursing programs in California. Of seventy-four schools in the state, forty-five responded to the survey. Of the respondents, sixty-two percent of schools were using body systems, a medical model as their conceptual framework. Only sixteen percent of schools used nursing theories. Four schools used Orem. Two schools used Roy, and one school used an unspecified nursing theory. The remaining twenty-two percent of schools used theories borrowed from the behavioral sciences. The LBCC VN program adopted Orem's Self-Care Theory in 1989 and was one of the four California schools using Orem's Theory as a curricular organizing principle.

Deloughery (1991) explains the contingencies upon which acceptance of a nursing theory is based. The theorist's work must be a substantial publication. The theory must be widely read and adequately described so that nurses can understand how to apply the principles to practice. Furthermore, there must be enough educated nurses who understand the theory to teach it to others. Four textbook editions of Orem's theory have been published: 1971, 1980, 1985, and 1991. Most general nursing textbooks discuss nursing theories and Orem's theory is usually included in the discussion. In her monograph about Orem's Theory, Hartweg (1991) included 138 references. In the bibliography she lists eighteen articles and books by Orem plus twenty-five other entries, including three media entries and one software entry.

Hartweg (1991) describes the dissemination, verification and current development of Orem's theory. Taylor, of the University of Missouri, Columbia, initiated a curriculum network directory in 1980 and later, a newsletter. Biannual conferences have been held at Columbia since 1982, and the first international conference was held in Kansas City in 1989. An Orem research study group was organized in 1984 at Wayne State University in Detroit. Self-care theory based computer software has been developed that links client assessment with nursing diagnoses, patient outcomes planning for care and clinical research.

Nursing Theory in the LBCC VN Program

Before 1989 the LBCC VN program used an eclectic conceptual model: Body Systems-Developmental Levels-Stress. The body systems core of the curriculum was based on the medical model; the developmental levels segment was based on Erikson's theory of growth and development; and the stress component was derived from Selye's work. The 1985 edition of Orem's Nursing Concepts of Practice was the foundation used by the LBCC VN faculty when they began the process of changing their curriculum to a self-care focus. Several members of the faculty were familiar with the theory from their graduate school work. Other faculty learned the theory through self-study. In 1989, the faculty completed a major curriculum revision, based on Orem's Self-Care Deficit Theory of Nursing (SCDTN).

Development and Content of Orem's SCDTN

Orem (1985) describes the beginning of her efforts to understand nursing.

> In 1958 and 1959, as a consultant in the Office of Education, U. S. Department of Health, Education, and Welfare, I participated in a project to upgrade practical (vocational) nurse training and to identify ways to include in practical nurse curricula an explicit nursing component. Such a component would give nursing meaning to the tasks around which the knowledge and experience components of training programs were organized. . . . I proceeded . . . by reflecting upon my experiences in nursing. I stated a proposition and in light of the proposition asked a question. The proposition was expressed in this fashion: *Not all people under*

> *health care, for example, from physicians, are under nursing care nor does it follow that they should be.* Then I asked a question phrased somewhat as follows: *What condition exists in a person when that person or a family member or the attending physician or a nurse makes the judgment that the person should be under nursing care?* The answer to the question came spontaneously with images of situations where such judgments were made and the idea that a nurse is "another self," in a figurative sense, for the person under nursing care.
>
> My insights into the *human condition* associated with *requirements for nursing* were formulated as a concept and expressed as follows: The inability of a person to provide continuously for self the amount and quality of required self-care because of the situation of personal health. Self-care was conceptualized as the personal care that human beings require each day and that may be modified by health state, environmental conditions, the effects of medical care, and other factors (18, 19).

Hartweg (1991) offers a brief biographical sketch of Orem. Orem was born in 1914. She earned her nursing diploma from Providence Hospital School of Nursing in Washington, DC and her BSN and MSN in education from the Catholic University of America. She has received three honorary doctorates. Currently she is a consultant in nursing in Savannah, Georgia.

The fourth edition of Orem's text (1991) includes the information from the previous edition, new propositions in the Theory of Self-Care, and selected parts of some of her other earlier work (Hartweg, 1991). Orem (1991) lists five underlying premises that have served as "guiding principles throughout the process of conceptualizing nursing" (66). She listed the five premises in the 1985 edition of her book. However, at that time, she considered them more tentative and labeled them as assumptions. These premises are as follows:

> 1. Human beings require continuous deliberate inputs to themselves and their environments in order to remain alive and function in accord with natural human endowments.
> 2. Human agency, the power to act deliberately, is exercised in the form of care of self and others in identifying needs for and in making needed inputs.
> 3. Mature human beings experience privations in the form of limitations for action in care of self and others involving the making of life-sustaining and function-regulating inputs.
> 4. Human agency is exercised in discovering, developing, and transmitting to others ways and means to identify needs for and make inputs to self and others.
> 5. Groups of human beings with structured relationships cluster tasks and allocate responsibilities for providing care to group members who experience privations for making required deliberate input to self and others (67).

Orem (1991) explains that three theories form the basis for a general theory of nursing named the self-care deficit theory of nursing. The three theories are as follows: theory of self-care, theory of self-care deficit, and theory of nursing systems. The figure below is adapted from page 66 of Orem's 1991 text and shows the relationships among the three theories.

Hartweg (1991) summarizes the central idea of each of the three interrelated theories: "Individuals are affected from time to time by limitations that do not allow them to meet their self-care needs" (11). The central idea for the theory of self-care is that self-care is emphasized as learned behavior and as deliberate action that may be influenced by cultural and social experiences. In the 1991 edition of her book, Orem made substantive changes in this theory. The central idea for the third theory, the theory of nursing system, is that nurses determine if nursing is necessary or "legitimate." To do this the nurse decides whether there is an existing or potential deficit between the client's abilities and the demands for action. If a deficit exists, the nurse must make a plan of care to identify "what is to be done and by whom" (13).

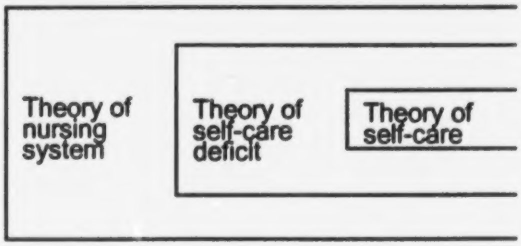

Figure 1

Constituent Theories, the Self-Care Deficit
Theory of Nursing

In summary, Hartweg (1991) explains that nurses sometimes focus their work primarily within one theory. For example, in an acute care setting, the nurse may operate mainly within the self-care deficit theory. Whereas, in an ambulatory care setting the nurse may use the theory of self-care almost exclusively. However, the theory of nursing systems is the key, in that it explains the actions of the nurse.

In the new edition of Orem's book, she has omitted or updated several of the illustrations. She omitted a detailed case study and its omission is illustrative of the changes in health care delivery from 1985 to 1991. In the omitted study, the client was admitted two days before foot surgery and was hospitalized for a week or so after surgery. Today, she would probably be admitted to a day surgery center on the day of surgery, have orthoscopic surgery, and be able to go home on the day of surgery or a day or so later.

New data, reported in the 1991 edition of Orem's book, are from a survey of nursing home residents to "identify (1) reasons for admission to the home and (2) factors that would condition the kind and amount of nursing required" (343). The study resulted in the identification of obstacles that affect meeting universal self-care requisites.

The work of several other authors also contributed to the faculty's understanding of Orem's work. Stevens (1979) writes a text about nursing theory in general. She points out that in Orem's theory both the nurse and the patient do self-care. The self-care may be more complex or the client may be less able to perform self-care, but the self-care does not change. "Thus for Orem, the power of agency for self-care is the real issue, not whether it happens to reside in the patient or the nurse at any given time" (76). Stevens describes action based models and uses Orem's theory as an example of such a theory. "When focus is placed on selection among nursing acts, the curriculum is operational" (151). Usually the nurse agent is the person performing the action and the focus is on what the nurse does whether it is cognitive, affective, or psychomotor behavior.

Fawcett (1984) writes an analysis of conceptual models of nursing and includes a section about how a nurse can select a conceptual model. Fawcett suggests that the nurse state his or her own philosophy because the values of the nurse will direct him or her in selecting a conceptual model. Next, the nurse should analyze several models, using the following considerations: the historical development of the theory; the author's approach to nursing knowledge; how person, environment, health, and nursing are defined and related to each other; and what are the areas of concern for the model and the source of the concerns. Then, the nurse should evaluate the model, asking the following questions: Are the model's assumptions explicit? Are the descriptions of person, environment, health, and nursing complete and are they linked? Do all the parts of internal structure fit together? Does the model fit with social expectations or would social change be required? Does the model lead to nursing actions that are socially significant?

Use of Conceptual Models

Bevis (1989) describes the value of a nursing theory in a curriculum. She defines a nursing theory as "a meaningful way of looking at data" (99). She feels that nursing theories "provide definitive content-organizing strategies for the curriculum" (99). Also, the nursing theory helps the teachers and students identify the most important aspects of nursing problems.

Fawcett (1984) suggests that a model is useful when it improves understanding of behavior more than would be possible by observing the behavior directly without the model. She warns, however, that it is difficult to compare models with each other except in a very global way that considers the total impact of the models. Fawcett then uses the above criteria to describe seven major nursing theorists, one of whom is Orem.

Fawcett evaluates Orem's Self-Care Model by declaring that it "contributes significantly to nursing knowledge by providing an explicit and specific focus for nursing actions which is different from that of other health care professions" (1984:199). She comments that the "extensive and relatively unique vocabulary requires mastery for full understanding of its content" (200). She points out that two of the theory's strengths are the idea of self-care for individuals along the health continuum, and the supportive-educative nursing system. She concludes that the wide acceptance of the theory with its emphasis on the individual in different settings and in different age groups is testimony to its usefulness.

Stevens (1984:145) discusses nursing theory and nursing curricula and states that nursing theory is the subject matter in a curriculum that organizes and designs the curriculum. She indicates that "whether faculty recognize it or not, a nursing curriculum conveys a theory (or theories) of nursing by virtue of the content selected for study." If the theory is not clearly stated and understood by the faculty, the student will be exposed to each instructor's personal ideas about nursing, some of which may be different or even conflicting. Stevens suggests that students will learn best if the faculty clearly understand the theory base for the curriculum and that the students will learn better if they are aware of the framework around which the curriculum is built. She believes, "that the student in a basic nursing program . . . learns best under a single theoretical model" (147). She asserts that the curriculum is the mechanism by which the students learn the theoretical model and suggests that the curriculum be organized around the key principles elucidated in the theory. If, as is commonly encountered, the various departments in a program are the organizing principle, the student would move from fundamentals of nursing (skills-based), to medical-surgical nursing (disease-based) to specialty areas such as psychiatry (behavior-based), or maternal-child health (development-based). When this happens, the student does not know whether nursing is a set of skills, or treatment of diseases, or facilitation of normal development. Such a curriculum leaves the student with no unified understanding about the meaning of "nursing," because s/he has been presented with a different view of nursing in each block of study. Stevens concludes by exhorting faculties to identify and teach the theoretical model that forms the basis for their programs. "These structural aspects of nursing theory provide the matrix that makes a given program a unified whole. A theory-based nursing program makes the content available to the student and provides her with a structure in which she can continue to fit new information after her completion of the given program" (159).

Criticism of Orem's SCDTN

Parse (1987) has collected a summary of each of the major nursing theories, written by the authors of the theories. A critique follows each theory. Orem's summary is very much like the explanations in her books. The critique written by Smith, although somewhat harsh, does offer interesting insights. Smith compares the theory to the medical model and considers that it does correspond well with medicine. She suggests that this correspondence "reaffirms nursing in its traditional role" (96). However, she does not clarify whether the "traditional role" is subservience or cooperation. She indicates that the deficit relationship leads to a focus on disorder. This may be a common misunderstanding, but Orem (1991:73) clarifies the meaning of the term. Orem states, "*Deficit* thus stands for the relationship between the action that individuals should take (the action demanded) and the action capabilities of individuals for self-care or dependent-care. *Deficit* in this context should be interpreted as a relationship, not as a human disorder." Smith is critical of the language Orem chooses to use in explaining her theory. "There is a pattern of excessive verbosity in describing the empirical and circularity obfuscating meaning. The effort to explain the meaning of a term by adding more concrete terms only makes the obvious more complex" (97). Smith (99) continues with this theme. "It is a further expectation of definitions that the definition not include the term or part of the term to be defined. Yet self-care is defined as the production of actions directed to self; . . . This circularity limits interpretation and substance. When the term is used to define itself, the term turns right back on itself rather than being expanded in meaning." Smith feels Orem's presuppositions are stated very generally and lead the reader away from the central idea of the theory. Also she considers that the basic concepts of Orem's propositions are not sufficiently related. Smith asserts that there are three elements of scientific beauty: simplicity, harmony, and brilliance. "Orem's theory is not parsimonious, lacks symmetry, makes the simple complex, and obfuscates clarity" (101). However, Orem's theory is powerful in that it has found acceptance in education, practice, and research. "Orem is indeed a pioneer and is highly respected in nursing for her contributions. She has had the courage to make her ideas public so that they could be critically evaluated in an effort to advance the science of nursing" (104).

Application of Orem's Theory

Parker (1990) edits a text that presents eight major nursing theories, summarized by their originators. Each summary is followed by a chapter describing the nursing application of the theory. Orem (47) introduces her theory by explaining that nurses know that nursing is producing helpful results, but they need to be better able to tell others what they do, why the do it, and they want to be better able to determine why their practice is effective. "The nurses who ask such questions are thinking nurses." They have knowledge from nursing practice and human and medical sciences. Yet, "they do not have speculative or theoretical knowledge of nursing." A first step toward developing nursing sciences is to focus on "nursing theories that will explicate a wide range of nursing practice situations. A general theory of nursing is one that applies to all situations of practice and explains when and why nursing is needed by individuals or families, what is involved in nursing, and what results can be achieved through nursing" (48). Orem then continues with a description of her Self-Care Deficit Theory of Nursing. While discussing her general theory of nursing, she answers the criticism about her terminology by commenting, "Concepts and elements of a theory are named by theory developers. The language used to describe theory may differ from our everyday use of words" (50).

Taylor provides the practical applications of Orem's theory (Parker 1990). She comments that nursing theory, "gives direction . . . [and] guides decision making and action in nursing practice" (62). "The essential aspect of theory-based nursing is the development by the individual practitioner of a way of thinking about or viewing the world of nursing that is based on an explicit theory or model" (63). In the following example, related by Taylor, the nurse must decide if one or both of the ambulatory clients should be a legitimate recipient of nursing care, and if so, what care should they receive.

The doctor has given Mr. Jones a new prescription for hypertension. The nurse will assess the presence and nature of self-care deficits. Mr. Jones is independent in self-care. He understands the effects of his new drug. He also understands and has been following his diet and exercise routine. However, his blood pressure continues to be elevated.

Mr. Smith cares for his daily hygiene, but depends on his wife for all other areas of self-care. He follows his diet and medication regime as long as his wife provides direction. They are both satisfied with the routine they have worked out over the years. Mr. Smith's blood pressure is under control.

Mr. Jones may need some ongoing support to maintain his regime, but his difficulty is primarily a medical problem. Mr. Smith has self-care limitations. He may need to assume some responsibility for his own care. At least he should understand the care that has been prescribed for him. If he is unwilling to learn and take some responsibility, the nurse may want to work with Mrs. Smith to identify potential alternate care systems in case she could no longer care for him. The nurse who is concerned about the client's responses to his illness and his ability to care for himself, is the nurse who is offering legitimate nursing care to the client.

Differentiation between Nursing and Medical Treatment

The nursing care, as referred to by Taylor (above), is independent nursing care. Alfaro, (1990) clarifies this type of nursing by defining the nursing diagnosis and identifying the type of problem treated independently by a nurse.

> Nursing Diagnosis: An actual or potential health problem that focuses upon the *human response* of an individual or group, and that nurses are responsible and accountable for identifying and treating *independently* (66).

A nursing diagnosis may be contrasted with a collaborative problem that Alfaro defines as

> An actual or potential health problem (complication) that focuses upon the *pathophysiologic response* of the body (to trauma, disease, diagnostic studies, or treatment modalities), and that nurses are responsible and accountable to identify and treat *in collaboration with the physician* (66).

Alfaro also contrasts a nursing diagnosis or a collaborative problem with a medical diagnosis that is defined as

> A traumatic or disease condition that is validated by medical diagnostic studies, and for which treatment focuses upon correcting or preventing *pathology of specific organs or body systems* (requires treatment by a licensed physician) (67).

In 1983, Carpenito (1992:36) originated the model for nursing care that identifies two foci for nursing care that is fully or partially independent. These foci are independent care based on nursing diagnoses and collaborative care, given in cooperation with other disciplines, that is based on "a collaborative problem." Carpenito asserts that the difference between nursing and other disciplines is that nursing has a greater depth and breadth of focus than other the disciplines. She contends that this "possibly explains why past attempts to substitute other disciplines for nursing have proved costly and ultimately unsuccessful." Greater breadth of responsibility results in the need to collaborate with other disciplines to arrive at definitive diagnoses and treatment of client problems. Very often, the nurse resolves collaborative problem with a doctor, but the collaborator may also be a nutritionist, pharmacologist, or other health worker.

Carpenito suggests that the use of collaborative problems has refined the scope of nursing practice. "Collaborative problems are certain physiologic complications that nurses monitor to detect onset or changes in status" (38). In these situations, the nurse has the primary responsibility for care, but if the problem goes beyond the nursing practice parameters, the nurse calls a collaborator to assist in resolving the client's problem. The important differentiation between these problems and nursing diagnoses is that nurses monitor and manage these changes in status or complications of illness, whereas nurses independently diagnose and treat client responses that result in nursing diagnoses. "Nurses manage collaborative problems [by] utilizing physician-prescribed and nursing prescribed interventions to minimize the complications" (38). Carpenito explains that care measures prescribed by nurses to be implemented by themselves or other nursing staff are regarded as independent nursing tasks. Interventions prescribed by physicians for nursing staff to implement are considered delegated nursing tasks.

An example of a collaborative problem might be the potential complication of "hypovolemic shock following surgery" (Carpenito, 1992:954-55). The nurse monitors the client's blood pressure, color and temperature of the skin, pulse rate, respiratory rate, level of consciousness, and any signs of bleeding to determine whether post-operative shock is beginning. If the blood pressure drops a little, the skin becomes cool and a little more pale, the pulse and respirations are a little more rapid, but there are no overt signs of bleeding, the nurse may invoke several nursing-ordered interventions to manage the problem: add a warm blanket, ask the client to cough and take several deep breaths, assess the client for pain, lower the head of the bed and elevate the client's legs. If the client is having pain and relaxation techniques and repositioning do not resolve the discomfort, the nurse might utilize a doctor's order and administer a pain medication. If the blood pressure drops a little more the nurse calls the doctor to get a doctor's order for an increase in intravenous fluids and to alert the doctor that the client may be bleeding internally. A continued drop in blood pressure would result in the doctor being called to come to the bedside to make further definitive assessments and to order more fluids, or take other measures to resolve the problem that has now become primarily a medical problem.

Particularly in hospital situations, many client care interventions are delegated to nurses by the physician. Alfaro (1990:110) lists these interventions as follows:

- Diet/activity restrictions
- Frequency of recording of vital sign, or other special assessment (e.g., neuro checks)
- Medications/intravenous fluids
- Treatments/diagnostic studies

Alfaro also gives examples of specific nursing interventions to prevent or correct potential complications that the physician orders. Examples of such nursing interventions include the following:

- Irrigating a nasogastric tube or Foley catheter to prevent it from becoming blocked by clots or sediment
- Maintaining suction for drainage tubes to facilitate drainage
- Administering anticoagulants to prevent thrombus formation
- Administering intravenous fluids to prevent dehydration or electrolyte imbalance

In Christensen and Kenney (1990:160), Risner summarizes the situation by identifying

> two domains in providing client care: (1) The *nursing domain*, which is independent and related to judgments regarding the client's health status and its effect on daily living (nursing diagnosis) and (2) the *biomedical domain*, in which nurses have collaborative responsibilities (using knowledge, experience, skills, and clinical judgment) to monitor and assess the client's pathological condition or medical diagnosis.

Physicians treat disease or trauma and write doctor's orders to delegate specific client care interventions to nurses.

In Christensen and Kenney (1990:15) Kenney states that nursing theories "provide a broad framework to interrelate various aspects of the client's complex health situation." They direct the collection, organization, and interpretation of data about the client and guide the nursing diagnoses, plans, implementation, and evaluation of care. "They provide a logical basis for explaining how nurses assist clients toward optimum health" (18).

Using Orem's SCDTN in the Clinical Setting

In discussing the collection of information for a nursing data base Steiger and Lipson (1985:35) suggest using the term, "reason for contact" rather than the more common chief complaint. They point out that asking, "What is the matter with you?" implies a medical orientation and disease orientation. Whereas asking, "How can we help you?" is more suggestive of a self-care orientation.

When the collection of data is completed, nursing diagnoses may be made. However, in the area of wellness and prevention, "there is considerable controversy over what are acceptable diagnoses" (47). Steiger and Lipson suggest that such diagnoses be converted into a health needs list. The nurse should write this list with the client, so that the client is a partner determining and resolving his or her health needs. However, there is a problem in determining health needs. There is no universally accepted definition of health. Steiger and Lipson suggest that health may be defined as the absence of disease, being able to perform expected roles in society, being able to adjust to the environment, and being a state of positive well-being or happiness. Steiger and Lipson also relate Dunn's ideas about health. In 1959 Dunn coined the term, "high level wellness." He suggested that normal health is balanced with minor illnesses and good health; high level wellness is compared with serious illness; and peak wellness is contrasted with death. Nevertheless, even with many seemingly acceptable models to follow, the controversy continues. Steiger and Lipson maintain that no matter how the health professional defines health, the client may have different ideas, and these will be the all-important factors in determining what the client will do or not do to maintain or enhance his/her health. In any case, there are several components that need to be considered in any program for self-care to maintain health:

Nutrition and elimination
Activity, rest, and exercise
Stress management
Spiritual and psychological well-being
Sexuality
Social support and self-help groups
Personal safety and environmental awareness (Steiger and Lipson, 1985:62).

In contrast to the components for a self-care program to enhance or maintain health, the following are the categories of self-care behaviors in illness: "prevention, detection, and management" (79). These categories of behaviors are usually assessed in relation to physical systems and psychological status. Steiger and Lipson (1985:86) list the following areas of assessment: arthritis, cancer, and cardiac, gastrointestinal, hepatic, neurological, renal, and respiratory disease. Again, they exhort the health care professional to create a partnership with the client for devising the self-care plan. They give several case studies describing self-care in disease, explain several teaching strategies, and furnish an in-depth analysis of the components in a health-maintenance self-care program.

Steiger and Lipson (1985) conclude by commenting on the future of self-care. "Self-care can be a powerful philosophical basis for nursing practice" (306). In both hospitals and community facilities, self-care will soon become economically mandatory. "Nursing is the backbone of community services such as outpatient departments and home health agencies. A philosophy of self-care is essential in these settings; the goal of nursing should be to help clients increase their ability to take care of themselves. . . . Self-care teaching might be the greatest contribution that the nursing profession can make to the health of society and to cost containment in health care" (307-08).

Hill and Smith (1985) look at self-care from a broader view. They review Orem's Self-Care Deficit Theory of Nursing, and the self-care ideas of non-nurse experts. They relate the history of the self-care movement. Before the eighteenth century, medical services were not available to most people and "the self-care tide was in" (5). With the advent of medical and nursing schools, doctors and nurses became available to take care of the sick. People began to depend on health care providers to maintain their health. This worked when communicable and infectious diseases were the most common causes of illness. The doctor could give the client a shot, and he was soon well. However, as people began to live longer, diseases that are linked to life style, such as hypertension, ulcers, and heart disease became more prevalent. Now, the "self-care tide" is coming back in again. Naisbitt (1984) refers to this megatrend as a move from giving the medical establishment responsibility for one's health to assuming personal responsibility for health. Hill and Smith describe self-care nursing as a specific approach to clinical practice. The goal of this kind of nursing is that the clients become able to perform their own self-care without or with only minimal contact with health services.

Nursing Diagnosis and Critical Thinking

The literature related to nursing diagnosis and critical thinking provides a foundation for integrating these concepts into the Long Beach City College ambulatory care clinical experience. This review will first examine the place of vocational nursing in the field of nursing, and the sequence of events related to entry-into-practice for registered nurses. These events are important because the status of vocational nursing within the whole nursing field influences the level of preparation of vocational nursing students. Then the history of the development of the nursing process will be reviewed, along with a clarification of the place of nursing diagnosis in the nursing process and the meaning of nursing diagnosis to registered nursing. Next, there will be an explanation of the vocational nursing scope of practice; how the nursing process is interpreted in the licensing examination for vocational nurses; the connections between nursing diagnosis, analysis/synthesis, and critical thinking; literature that supports nursing diagnosis for vocational nurses; and the report of a telephone conversation with the staff of the Board of Vocational Nurse and Psychiatric Technician Examiners. Then, the California Education Code requirement for critical thinking will be explored. This section will conclude with a description of the work done by the Long Beach City College Faculty in the area of critical thinking and nursing diagnosis.

Vocational Nursing's Place in the Field of Nursing and the Entry-Into-Practice Controversy

Grippando and Mitchell (1989:65) discuss the acceptance of the practical/vocational nurse when the criteria for this level of nurse were first published in 1947.

> Many individual professional nurses, however, appeared unable to accept the non-professional person in the nursing situation. There were some who even spoke disparagingly of the use of assistant personnel in caring for the sick. Some professional nurses expressed sincere concern about the quality of patient care the nonprofessional would be capable of giving, while other nurses were fearful of their own future.

The first practical nursing school was founded in 1892, just twenty years after the first professional nursing schools (Grippando and Mitchell 1989:63, 67). However, since the mid 1960s, practical nursing's existence has been threatened by the registered nurses' entry-into-practice controversy. In 1965 the American Nurses Association (ANA) formally introduced "American Nurse's Association's First Position on Education for Nursing " ("ANA First Position," 1965). The ANA states, "Ever since its founding in 1896, the association has made clear its responsibility for determining the scope of nursing practice and assuring the public that those who practice nursing are competent" (106). In this position paper the ANA mandates the following educational requirements:

> *minimum preparation for beginning professional nursing practice at the present time should be baccalaureate degree education in nursing* (107); . . . *minimum preparation for beginning technical nursing practice at the present time should be associate degree education in nursing* (108); . . . *education for assistants in the health service occupations should be short preservice programs in vocational education institutions rather than on-the-job training programs* (108).

Ellis and Hartley comment that this paper, "virtually eliminated the 1-year practical nurse program as it was currently known" (1992:95). The position paper was specific in describing educational preparation, but did not define the competencies for the different levels of nursing practice or the titles for the practitioners.

Segal (1985:43) justifies having a baccalaureate degree to enter the practice of nursing.

> Strict, consistent, educational requirements are considered necessary for several reasons: They limit access to the field, weeding out the uncommitted and unqualified; they ensure that aspirants receive the specialized knowledge they'll need to work within the field; and they separate the professionals from workers in related but nonprofessional fields.

For twenty years, the controversy continued among organized nursing's leaders, but practical/vocational nursing education continued preparing beginning level nurses and practical/vocational nurses continued to care for clients at the bedside.

In 1985 the ANA House of Delegates voted to reserve the title "registered nurse" for the professional nurse and to use the title "associate nurse" to designate nurses in associate degree programs ("ANA Delegates," 1985:1016). During the ANA convention, there was considerable jockeying for positions of strength by associate degree supporters and practical nursing supporters, to be chosen as the bearers of the "associate nurse" title. Some delegates were concerned that instead of accomplishing their goal of having two levels of nursing, the LPNs would not accept the delegates' decision and there would be three levels of practice. The National Federation of Licensed Practical Nurses (NFLPN) supported expansion of the licensed practical nurse curriculum so that practical nurses could fill the role of associate nurse, but the resolution was referred to committee for further recommendations ("ANA Delegates," 1985).

In addition to education and titling, the issue of scope of practice is of great concern for nursings's leadership (Ellis and Hartley, 1992). The scope of practice delineates the legally sanctioned functions of licensed persons (Hamilton, 1992), and is determined by the states in their individual practice acts. Only one state, North Dakota, has revised its practice act to carry out the ANA mandate that registered nurses must have bachelor's degrees ("North Dakota," 1987).

The National League for Nursing (NLN) is a nursing organization that is primarily responsible for educational standards and nursing school accreditation (Ellis and Hartley, 1992). In 1985 the NLN had also come out for two levels of practice. In February 1987, NLN took a stand that LPN programs should be phased out. However, at the June 1989 convention, members of the Associate Degree Nursing (ADN), Diploma, and LPN postpone Nursing Councils outvoted the Baccalaureate Council members and passed a resolution to action on entry-into-practice, indefinitely ("League 'Postpones' Action," 1987). At the June 1989 convention, the majority of NLN members "made it clear that they wanted no part of change in entry level" ("NLN Members Agree," 1989:1082).

The American Nurses' Association Convention in June 1989, faced the entry-into-practice issue in another guise. The association was attempting to adopt a new organizational structure and the issue of membership for "second-level practitioners" emerged. Some members felt the argument was passé, " . . . differentiated practice is evolving in the workplace." After extensive negotiations, the delegates resolved the problem by agreeing to "shelve the whole debate" ("Delegates Remodel ANA," 1989:1228), and thus dropped the entry-into-practice issue.

In October 1990, nursing leader, Margretta Styles, reported on a project to establish a national board for nursing specialization that would grant national certification. She suggested, "This could be a way of solving the entry-into-practice issue" (83). In June of 1991, the ANA "upheld the new policy" that requires a BSN for certification for generalist nurses by 1998 ("ANA Members Say No," 1991:68).

In December of 1991, Chinn attempts to assess the present state of nursing and predict its future for the year 2000. Chinn feels that although the entry-into-practice issue was put aside by nursing leadership in 1989, it is still causing division among nurses. She comments,

> Our debates about entry-into-practice or defining "roles" of various types of practitioners, or our efforts to "simplify" nursing credentialing stem from what we have been taught to value in terms of "status" in a hierarchal system of health care that emphasizes individuality and serves primarily to divide us from one another—a powerful tool to sustain oppressive relationships.
>
> When we move toward recognizing the inherent value of our diversity and bring together various perspectives, skills, and talents to meet the increasing and complex needs of the people we serve, then we will begin to see ways in which we can work effectively together as we move toward the next century. . . .One of the most self-caring projects that we as nurses can take on is to finely tune skills in honoring diversity and create peace in our interpersonal relationships; I believe this will be fundamental to our future. (Chinn, 1991:254).

Organized nursing has gone through troubled and divisive times since the 1965 decision to make a baccalaureate degree a requirement for entry-into-practice. Although there have been efforts to eliminate practical/vocational nursing, this level of nursing practice continues to exist.

History of the Nursing Process, the Place of Nursing Diagnosis, and Its Meaning to Nursing

Iyer, Taptich, and Bernocchi-Losey (1991) give Yura and Walsh credit for first describing the four-step nursing process in 1967. The steps are assessment, planning, implementation, and evaluation. In 1967, nurses did not clearly differentiate the analyzing/diagnosis step from the assessment step. In 1973, the ANA adopted the five-step nursing process, adding the analyzing/diagnosis step. Since 1975 most states have revised their registered nursing practice acts to reflect this change (Christensen and Kenney, 1990). Aspinall and Tanner (1981:5) evaluate the diagnostic phase of the nursing process by describing it as, "the most complex, and, at the same time, the most critical component of the entire nursing process. The planning and subsequent interventions will be successful only to the extent that the data base and nursing diagnoses are accurate and complete." However, even though this step is the keystone of the nursing process, Ellis and Hartley (1992:101) report, "the process of making nursing diagnoses and developing nursing care plans has been included in the scope of practice of the professional nurse only."

Tartaglia (1985:34) explains the importance of nursing diagnosis: "the nursing diagnosis actually defines the practice of nursing. At a time when we nurses are fighting to keep our jobs, the use of nursing diagnosis defines *what* it is that we do...and demonstrates convincingly *how* what we do is distinct from what doctors and other health care professionals do." He goes on to say that nursing diagnosis saves time because it improves communication among the nursing staff. When all the nurses use the same terminology, they will know exactly what each client's problems are and how the problems are to be resolved.

A few months later, Segal asks, "Is Nursing a Profession?" and answers her own question, "NO" (1985:42). As supporter of the baccalaureate degree as a requirement for entry into the practice of nursing, she is expressing the need for nursing to be considered a profession. Segal, a lawyer, explains that the courts use different standards to judge doctors and nurses, primarily because medicine is a profession, and nursing is not considered to be a profession. She quotes from the court's opinion, "A [registered] nurse, although trained and skilled, is not required to exercise independent judgment on life and death matters. Her primary function is to observe and record. By the very nature of her occupation, a nurse is prohibited from exercising independent judgment." Segal asserts, "Although that conclusion was inaccurate 20 years ago, that's how most courts still look at the issue." Another court decision declared, "For a nurse to interpret signs and symptoms and make independent judgments is to go beyond the very nature of her profession," and Segal maintains, "most courts today [1985] would reach the same conclusion."

A year later, in 1986, Dolan approaches the issue from another direction and declares that nurses should make "medical diagnoses," as contrasted with nursing diagnoses. She says, "Lets face it. Nurses diagnose. They have to in order to carry out their duties." She insists that only in situations where nurses "must be *officially* recognized as making diagnoses do we run into opposition" (50). She then explains, "We're living in times when everyone in the health care system is going to have to define and prove his value. Otherwise, that person goes...and is replaced by cheaper help. Diagnosis is valued. Now is the time to make sure it's defined as part of our profession" (50).

The question may be asked, "What is a nursing diagnosis?" There have been many working definitions of this concept. However, in 1990, the North American Nursing Diagnosis Association (NANDA) approved a formal, two-sentence definition of nursing diagnosis: "A nursing diagnosis is a clinical judgment about individual, family, or community responses to actual or potential health problems/life processes. Nursing diagnoses provide the basis for selection of nursing interventions to achieve outcomes for which the nurse is accountable" (Carroll-Johnson, 1990:50).

The ANA has recognized the North American Nursing Diagnosis Association as the official body to develop and approve nursing diagnoses (Lang and Gebbie, 1990:12). The ANA Board of Directors adopted the following policies in 1986:

> The professional association is committed to the development of a single comprehensive system for classifying nursing practice, [nursing diagnoses] . . . This uniform classification system for nursing will be designed for use in all nursing practice situations. . . . The professional association will promote the consistent use of the classification system in nursing education . . . [and] will encourage and actively work toward an international classification system of nursing practice (13).

NANDA is collaborating with ANA and has submitted a taxonomy of nursing diagnoses to the World Health Organization. The taxonomy will be considered for possible inclusion in the next revision of the International Classification of Diseases. Saba (1990:87, 88) says, "Today it is almost impossible to discuss nursing information systems without including nursing diagnosis. . . . The NANDA Classification of Nursing Diagnoses scheme is here to stay. It is being used by practicing nurses to document care in a standardized, uniform manner, as well as being incorporated in the newer nursing information systems."

NANDA (1991) states on their membership card, "Nursing diagnosis gives all nurses a common language to communicate the uniqueness of the work that we do." NANDA does not specify that only professional nurses can use the common language of nursing, but instead indicates that it is for all nurses. Harrington (1988:93) echoes this idea and says, "nursing diagnosis [is] a defining characteristic of nursing practice. . . . The use of a common language is directly related to how effective communication is. For nurses to work well within and across health care settings and geographical boundaries, we have to agree on a consistent nomenclature." Pinkley (1991:26) also repeats this concept when she states, "Diagnostic language and taxonomy are tools for precise, public representation of nursing knowledge. . . . Language defines the concepts of importance; taxonomy describes the relationships." Whitley and Dillon (1988:234) reiterate the same idea, "As nurses and students speak 'the language of nursing diagnosis,' they do so because they have learned to think 'nursing diagnosis' and it becomes increasingly difficult to remember what nursing was like without it and to communicate with those who do not use it."

The place of diagnosis in nursing is one of great importance, and one that creates many widely varying responses. There are economic, emotional, and professional aspects of the diagnostic role of nurses that need to be resolved. It is not surprising that this issue has also affected practical/vocational nursing.

The Vocational Nursing Scope of Practice, The Taxonomy of Educational Objectives, and Nursing Diagnosis

The California Vocational Nursing Practice Act (BVNPTE, 1987:94,95) specifies that vocational nursing "is the performance of services requiring those technical, manual skills acquired by means of a course in an accredited school of vocational nursing, or its equivalent, practiced under the direction of a licensed physician, or registered professional nurse" (§2859). Under this same section, the practice act specifies that vocational nurses may, after approved instruction, "administer medications by hypodermic injection," "withdraw blood," and "start and superimpose intravenous fluids" (§2860.5 (a), (b), (c)). In a similar manner, the vocational nurse may perform various "skin tests" and "immunization techniques" (§2860.7 (a) (1), (2)). Under "Scope of Examinations" the vocational nursing practice act prescribes the practical nursing examination, administered by the National Council (NCLEX-PN) as the examination for licensure (§ 2510). The Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE) specifies, by board policy, a list of forty-six bedside nursing skills that are to be taught in nursing programs. However, beyond these regulations and policies, there are no specific regulations that are designated as the "scope of practice."

In this "scope of practice," the key words are "performance of services requiring those technical, manual skills." The law says that vocational nurses are to perform technical, manual skills, and that is all that it says. However, the skills are to be acquired in an accredited school, and the curriculum, mandated for the schools, requires more than manual skills training. Section 2533 of the Vocational Nursing Practice Act (BVNPTE, 1987:127) states, "The basic curriculum shall be designed to develop knowledge and skills necessary to provide care for patients of all ages, and shall include (1) Anatomy and physiology, (2) Nutrition, (3) Psychology, (4) Normal growth and development, (5) Reproductive processes, (6) Nursing fundamentals, (7) Medical-surgical nursing care of patients with major health problems, and (8) Pharmacology." The purpose of the required basic curriculum is to develop knowledge, as well as skills. All these subjects, except nursing fundamentals and medical-surgical nursing, primarily involve the acquisition of knowledge.

According to the Taxonomy of Educational Objectives (Bloom et al., 1956:201, 204), the "Cognitive Domain" includes several levels of "Knowledge" and several kinds of "Intellectual Abilities and Skills." Intellectual skills are used to implement action related to knowledge. Comprehension, Application, Analysis, Synthesis, and Evaluation are sub-categories under Intellectual Abilities and Skills. The following outline lists the major headings (1956:201-07).

KNOWLEDGE
    1.00 Knowledge

INTELLECTUAL ABILITIES AND SKILLS
    2.00 Comprehension
    3.00 Application
    4.00 Analysis
    5.00 Synthesis
    6.00 Evaluation

Bloom et al. (1956:30) write a section in the Taxonomy of Educational Objectives titled, "The nature of abilities and skills."

> Although information or knowledge is recognized as an important outcome of education, very few teachers would be satisfied to regard this as the primary or the sole outcome of instruction. What is needed is some evidence that the students can do something with their knowledge, ... This has been labeled "critical thinking"

> by some, "reflective thinking" by Dewey and others, and "problem solving" by still others. In the taxonomy we have used the term "intellectual abilities and skills."

Nursing fundamentals and medical-surgical nursing are parts of the vocational nursing curriculum that require clinical experience; the California Vocational Nursing Practice Act requires 954 clinical practice hours during the program (BVNPTE, §2532 (b)). During these hours students must use the knowledge they have gained, to give client care. Therefore, the curriculum would require cognitive student behaviors related to intellectual abilities and skills, as well as knowledge.

While describing the taxonomy Bloom and his colleagues say,

> This taxonomy is designed to be a classification of the student behaviors which represent the intended outcomes of the educational process. It is assumed that essentially the same classes of behavior may be observed in the usual range of subject-matter content, at different levels of education (elementary, high school, college) and in different schools. Thus, a single set of classifications should be applicable in all these instances (12).

If it is true, as Bloom et al. have stated that the "same classes of behavior" may be observed from elementary to college level education, then it is appropriate to assume that all the intellectual abilities and skills: comprehension, application, analysis, synthesis, and evaluation, may and should be observed in the students who are being educated in the vocational nursing curriculum.

In an article for Psychology Today (Chance, 1987:46) Bloom talks about students who could not solve problems, "If we do not teach higher-level skills such as problem solving, we cannot reasonably expect students to master them." While commenting about displaced workers Bloom says, "We need large numbers of people with high-level skills who like to learn," and want to return to school for retraining. Practical/vocational nurses will need to spend much of their working lives solving client care problems at the bedside, and many will wish to continue their education.

Another way to approach scope of practice is to consider lists of competencies that have been approved for nursing students. Hamilton (1992:58) explains that "there are two recognized, clearly identified sets of competencies, one for registered nurses and one for practical nurses. There are two licensing examinations that measure those competencies: NCLEX-RN and NCLEX-PN." The National Council of State Boards of Nursing (National Council or NCSBN) prepares the Licensing Examination for registered and <<<MARK>>> practical/vocational nurses. The states then use this instrument as a licensing examination (NCSBN, 1989).

In the 1960s nursing embraced the four-step nursing process described by Yura and Walsh: "assessment, planning, implementation, and evaluation" (Iyer, Taptich, and Bernocchi-Losey, 1991:12). "In 1973 the American Nurses' Association in the 'Standards of Nursing Practice' accepted the five-step nursing process: assessment, diagnosis, planning, implementation, evaluation" (Christensen and Kenney, 1990:6). In the NCLEX-PN Test Plan for the National Council Licensure Examination for Practical Nurses the National Council states that the state board examination for practical/vocational nursing is based on the nursing process. "The phases of the nursing process are grouped under the broad categories of collecting data [assessment], planning, implementing, and evaluating nursing care. . . . the percentages of questions representing the various phases of the nursing process are as follows: 1) collecting data - 30%; 2) planning - 20%; 3) implementing - 30%; 4) evaluating - 20%." (1989:3). Analysis/diagnosis is omitted. Although the National Council does state that the vocational nurse "participates in the formulation of nursing diagnoses" (3) under the area of data collection, the licensing examination for practical/vocational nursing competency only includes questions related to the narrow definition of the nursing process used in the 1960s, rather than the broader definition that has been accepted by nursing since 1973. The steps of the nursing process are compared in Table 4 on page 63.

Table 4

Steps of the Nursing Process

1967 Yura and Walsh	1973 ANA Standards of Practice	1989 NCLEX-PN Test Plan
1. Assessment	1. Assessment	1. Data collection (Assessment)
2. Planning	2. Diagnosis [or Analysis]	2. Planning
3. Implementation	3. Planning	3. Implementation
4. Evaluation	4. Implementation	4. Evaluation
	5. Evaluation	

Arnett (1990) writes about the process of categorizing questions according to the NCLEX-PN test plan. She states that the National Council chose the five-part test plan for registered nurses and the four-part test plan for practical nurses because they feel that the practical nurse does not analyze. She expresses her evaluation of this situation:

> When evaluating the new L.P.N./L.V.N. test plan, some of the component parts of analysis have been added to data collection. This author believes and data from the job analysis study supports that L.P.N./L.V.N.s do some analysis. . . . The initial phase of the Nursing Process is assessment. The National Council has chosen to call it "data collection" for the L.P.N./L.V.N test plan. . . . The second phase, called analysis, is the one in which the patient's needs, problems, and nursing diagnoses are identified. Analysis, as a step of the Nursing Process has been left out for the L.P.N./L.V.N. on the Test Plan. . . . Items relating to analysis can be found under "data collecting." This indicates some analysis can appear on the exam but be classified as data collection (assessment). . . . To some degree, the L.P.N./L.V.N. determines the needs and problems and contributes or assists the R.N. in determining nursing diagnoses.

Arnett has identified a mode of thinking by National Council officials that is not congruent with the assumptions used by Bloom et al. Bloom and his colleagues felt that all the intellectual abilities and skills (including analysis) are used by all educational levels from elementary school through college. The National Council has deemed analysis and synthesis to be the prerogative of the professional nurse, and has therefore omitted this part of the nursing process from the state board examination for practical/vocational students. Of even more concern, nursing educators recognize the NCLEX-PN as the standard for competencies to be taught to practical nurses (Hamilton, 1992:58). Therefore, the NCLEX-PN has a powerful influence on the content taught in practical/vocational nursing schools.

Kenney defines the diagnosis step of the nursing process as involving "two phases: analysis/synthesis and diagnostic statements" (Christensen and Kenney, 1990:7). Risner, the author of a chapter in Christensen and Kenney, titles her chapter, "Diagnosis: Analysis and Synthesis of Data" (1990:132). She explains, "The analysis and synthesis process is evaluating, interpreting, and giving meaning to the collected data. It is the phase in which conclusions are made regarding the client's health status . . . " Risner defines analysis and synthesis.

> *Analysis* is the separation of material into constituent parts, the critical examination that defines essential features and their relations. In the nursing diagnostic process, analysis is the categorization of data and the identification of data gaps.
>
> *Synthesis* is the combination of the parts or elements into a single entity. . . . In the nursing diagnostic process, synthesis is the determination of patterns; the application of standards, norms, theories, and models; the identification of strengths and health concerns; and the delineation of relationships unique to the client (133).

The result of the nursing diagnostic process is a nursing diagnosis. Therefore, Risner must require both analysis and synthesis to make a nursing diagnosis.

Risner comments, "Nursing is not the only profession to diagnose. Workers in other professions and trades such as auto mechanics, social workers, and physicians make diagnoses" (133). However, she goes on to say, "The diagnostic process is the professional nurse's responsibility" (133), presumably excluding nurses not usually considered "professional"; i.e., technical nurses and practical nurses.

Wilkinson (1991:7) describes the steps of the nursing process as being sequential. She says, "each step depends upon satisfactory completion of the preceding steps." She admits that in an emergency each step may not always be completed before the next step is taken. However, she explains that when the emergency is over, the nurse returns to a more thorough collection and analysis of data. Kenney reiterates the same concept when she describes the components of the nursing process as being "interactive and sequential"

(Christensen and Kenney, 1990:7). If Wilkinson and Kenney are correct in saying that the steps of the nursing process are interactive and sequential, then omitting one of the steps could change the entire process.

In 1985, the ANA House of Delegates established a task force to determine the scope of practice for both the professional and the technical levels of nursing. In 1986, the task force reported that it had determined, "nursing has but one scope of practice" (qtd. in Hamilton, 1992:58). The task force identified the components of the scope of practice and concluded that there were differences between professional and technical nursing practice. However, the task force did not identify the differences. This finding, that nursing has one scope of practice, is at odds with the National Council decision to omit nursing diagnosis, and base the LPN/LVN state board examination on the four-step nursing process.

A number of resources support the inclusion of nursing diagnosis in the educational program for practical/vocational nurses. The NCLEX-PN Test Plan (NCSBN, 1989:3), under the description of data collection, says, "Participates in the formulation of nursing diagnoses." In the executive summary for a study of VN curriculum and employer requirements, Zylinski (1990:1, 2) asserts that a vocational nursing curriculum for the 90s should "define the role of the vocational nurse in terms of the nursing process," and lists as a requirement for a model curriculum, a "working knowledge of North American Nursing Diagnosis Association (NANDA) nursing diagnoses."

The Council of Practical Nursing Programs of the National League for Nursing, has distributed a booklet titled, Entry-Level Competencies of Graduates of Educational Programs in Practical Nursing (1989:2). In this booklet, under "planning," is the following competency: "Contributes to the development of nursing care plans utilizing established nursing diagnoses for clients with common, well-defined health problems."

The National Federation of Licensed Practical Nurses (NFLPN) has published a booklet, Nursing Practice Standards for the Licensed Practical/Vocational Nurse. NFLPN last revised this standard in 1987. The booklet states, "The planning of nursing includes: . . . an analysis of the information gained from assessment" (8).

NLN's Nursing Datasource 1990 casts another light on this question. "Government estimates indicate that approximately 608,000 LPN/LVNs are currently in the supply [of health care workers], and by the turn of the century the figure will grow to 756,000, . . . for many students, practical/vocational nursing is simply a steppingstone toward registered professional nursing, . . . over 41 percent of recent associate degree (AD) graduates previously held practical/vocational nursing licenses, . . . [and LPN/LVN] graduates are often the sole health care provider in some of the more rural areas" (3, 4). For those students who will climb the career ladder and become registered nurses, the standard, five-step nursing process, as the foundation for their nursing education is essential.

Benner writes a highly acclaimed analysis of the transition process, "From Novice to Expert" (1982). Benner observes that this progression consists of a series of skill acquisitions based on experience in solving clinical problems. She describes this progression as moving from reliance on abstract principles to experiential models and moving from seeing a situation as parts to seeing the situation as a whole with only certain significant parts. Benner's view may be contrasted with that of the National Council. The National Council believes the novice uses knowledge with only the intellectual skills of comprehension and application; the expert uses knowledge with all the intellectual skills, comprehension, application, analysis, synthesis, and evaluation, to solve nursing problems.

In April 1992, an interview was conducted with the BVNPTE nursing consultant, Ms. Cheryl Anderson. The consultant was asked to determine the level of importance for each of the items on a list of nursing skills learned in an ambulatory care facility. The question that raised concern referred to students learning to make a baseline assessment. The question asked whether it was "essential," "supplementary," or "unnecessary" to "Select the significant observations out of a baseline assessment." "Supplementary," was the nursing consultant's answer to this question.

During the interview this answer was questioned. The consultant's response was, "It is not the role of the vocational nurse to determine which observations are significant. S/he should report all of the observations to the registered nurse." On review of the data from the interview, a concern arose that there might have been a misunderstanding. A letter was written to Anderson, asking for conformation of her response, and a verification that her response is congruent with BVNPTE policy. Also, a confirmation was requested for the statement that analysis, synthesis, and critical thinking are beyond the scope of practice for a California Licensed Vocational Nurse.

On June 2, 1992, Ms. Billie Haynes, Executive Officer of the BVNPTE initiated a conference call to this writer. The other speakers involved in the call were the Supervising Consultant, Ms. Teresa Bello-Jones and four of the Board's nursing consultants: Ms. Cheryl Anderson, Ms. Barbara Jackson, Ms. Ann Schuman, and Ms. Gloria Smith-Nelson. Haynes stated that the purpose of her call was to provide clarification for the questions asked about the vocational nursing scope of practice and nursing diagnosis.

The essential elements of the conference call are summarized as follows:

1. The purpose of the vocational nursing practice act is to establish minimum acceptable levels of competence that will protect the health and safety of California citizens.
2. The BVNPTE must always assume a regulatory perspective; the BVNPTE cannot require more than the minimum standards.
3. The requirements set for schools of vocational nursing are minimum requirements and should not be construed as limits for educational innovation and creativity.
4. The BVNPTE can and does encourage schools to go beyond the minimum requirements.
5. The California Vocational nursing scope of practice is found in Section 2859 on page 94 of the Vocational Nursing Practice Act, 1987. "The practice of vocational nursing within the meaning of this chapter is the performance of services requiring those technical, manual skills acquired by means of a course in an accredited school of vocational nursing, or its equivalent, practiced under the direction of a licensed physician or registered professional nurse."

6. The BVNPTE must interpret the law as it stands; if the Board attempts to set standards above the minimum requirements it would be discriminating against students or schools that can only reach minimum standards.
7. Regulations in California's education code require California community colleges to include coursework requiring critical thinking in all associate degree credit courses. (The author contributed this comment.)
8. The National Council's determination that analysis and synthesis, and thus making nursing diagnoses, are the exclusive prerogative of the registered nurse constrains the BVNPTE in its interpretation of vocational nursing's scope of practice.
9. The BVNPTE considers analysis and synthesis to be beyond the scope of practice for California vocational nurses.
10. Analysis and synthesis are a part of critical thinking and thus critical thinking is beyond the scope of practice for California vocational nurses.
11. Any health care worker, even nurse aides, and certainly vocational nurses, do critical thinking but the BVNPTE cannot use those words to describe the thought processes required of vocational nurses.
12. It is essential that students be taught in such a way that they do not inadvertently go beyond the scope of practice for vocational nurses.
13. California law permits vocational nurses to practice in nursing homes with ninety-nine beds or less, without a registered nurse being on the premises; therefore, these nurses are responsible for giving all the nursing care to their clients.

At the end of the call each participant confirmed that consensus was reached and the group had correctly identified the facts, problems, and contradictions.

In summary, the California vocational nursing "scope of practice" defines vocational nursing as the performance of services requiring technical, manual skills acquired in a school that teaches nursing knowledge and clinical application skills. In The Taxonomy of Educational Objectives, Bloom and his colleagues (1956) state that analysis and synthesis are a part of the broad classification of intellectual abilities and skills. These abilities and skills should be taught and practiced from elementary school through college. Nursing diagnosis is a classifying system that gives all nurses a common language. Nursing diagnosis is an essential, sequential part of the nursing process. Deriving a nursing diagnosis demands the use of the intellectual skills, analysis and synthesis. The National Council and the ANA consider analysis and synthesis, in the form of nursing diagnosis to be the prerogative of the professional nurse and omit these modes of thinking from the state board examination for practical/vocational nurses. The requirements of the vocational nursing scope of practice and the National Council restrictions on analysis and synthesis are not congruent. Vocational nurses are expected to care for clients without the registered nurse on the premises, and yet they are not educated to use the intellectual skills of analysis and synthesis. The competencies required for a vocational nurse are prescribed differently by the many organizations related to nursing: professional nursing organizations, and agencies responsible for regulation of vocational nursing licensing, testing for licensure, education, practice, and health care.

Critical Thinking

Critical thinking is a major element in the educational reform that became law in November of 1988 (Glock, 1992). The regulations are found in the California Education Code, Title V:

> Chapter 6, Curriculum and Instruction; Subchapter 1, Programs, Courses and Classes; Article I, Program, Course and Class Classification and Standards; Section 55002, Standards and Criteria for Courses and classes:
> (a) Associate Degree Credit Course. An associate degree credit course is a course which has been designated as appropriate to the associate degree in accordance with the requirements of section 55805.5, and which has been recommended by the college and/or district curriculum committee and approved by the district governing board as a collegiate course meeting the needs of the students eligible for admission.
> (2) Standards for Approval. The college and/or district curriculum committee shall recommend approval of the course on the basis of the following standards:
> (F) Difficulty. **The coursework calls for critical thinking** and the understanding and application of concepts determined by the curriculum committee to be at college level (1992).

Glock (1987), a specialist in curriculum and instruction from the Chancellor's Office of the California Community Colleges, writes an analysis and explanation of the new Title V requirements. All college courses, acceptable for associate degree credit, must be "college level" courses. To meet the "college level" requirement, associate degree courses must demand critical thinking of the students.

Glock explains that the term "critical thinking," has acquired a broader meaning in the context of educational reform.

> "Critical" . . . seems to mean "crucial" or "essential" so that 'critical thinking skills' comes not to mean the "thinking skills used to critically evaluate something," but the "thinking skills that are critical to the accomplishment of something." . . . 'Thinking'

> has been similarly extended coming to cover not only verbal thinking, but also visualization, intuition, and action itself. 'Skills,' finally, has also broadened to include not only the skills *per se*, but also the disposition to use these skills" . . . Thus when the public demands improvement in "critical thinking skills" it is demanding not only, or even primarily, training in logic, but rather training in those skills of visualization and verbalization critical for success in most endeavor—as well as cultivation of the disposition to use these skills" (7).

Glock proposes the following broad definition of critical thinking skills:

> "Critical thinking skills" are (a) those diverse cognitive processes and associated attitudes, (b) critical to intelligent action, (c) in diverse situations and fields, (d) that can be improved by instruction or conscious effort (9).

She explains each one of the phrases in her definition, but her comments about diverse situations and fields are particularly related to the LVN to RN career ladder.

> These skills are useful in diverse situations and fields in that they are **equally fundamental to most fields of endeavor**. Once learned in one environment, and under the right conditions, they can be transferred into another. They will not, of course be sufficient for success in the new domain, since specific knowledge of the domain in question is always necessary as well. Instead, in the new environment, they will be applied on a trial and error basis, serving at first only to speed up the learning process in the new domain. Thus if effectively transferred, critical thinking skills substantially decrease the amount of time necessary to become proficient in a new field or endeavor, hence their "generic"—or better—their "generative" quality (10).

Glock asserts that it is not the intent of these changes in the education code simply to screen out the students who lack the ability to think critically. Instead, it is the intent of the law that these students should **learn** to think critically.

Strategies for teaching nursing are shared by de Tornyay and Thompson (1987). These authors state, "Development of a nursing care plan is believed to help students become more effective decision makers when applying knowledge to the clinical situation. . . . clinical decision making is a skill that can be learned; effective decision making is enhanced through education and opportunities for practice" (165).

Fayram (Christensen and Kenney, 1990) discusses the skills needed to implement a nursing care plan. She itemizes three types of skills: intellectual, interpersonal, and technical. She characterizes the intellectual skills as requiring the ability to reason and understand. The nurse uses these skills to evaluate the current plan and needs these skills to determine how to implement the plan. The nurse must also assess the client's ability to reason and understand before implementing a teaching/learning plan. The nurse uses interpersonal skills in communicating with the client and his/her family. Technical skills are invoked during the performance of nursing care procedures, so that they may be done safely and efficiently. Fayram explains that "Technical skills cannot be separated from intellectual and interpersonal skills" (213). Knowledge-based intellectual skills include knowing the steps of the procedure in their proper sequence, the expected outcomes, and complications. The nurse uses decision-making intellectual skills to determine procedural modifications to ensure the client's personal comfort and safety. The nurse uses interpersonal skills to explain the procedure to the client and gain his/her assent and cooperation.

The NCLEX-PN Test Plan (NCSBN, 1989:3) suggests that the "entry-level practical nurse acts . . . in a more independent role when participating in the data collecting and implementing phases of the nursing process." The NANDA definition of a nursing diagnosis expresses an action orientation that gives direction to nursing practice: "Nursing diagnoses provide the basis for selection of nursing interventions to achieve outcomes for which the nurse is accountable" (Carroll-Johnson, 1990:50). Pinkley (1991:26) states, "Nursing diagnoses are described by definition as the basis for selection of interventions to achieve health outcomes." The vocational nurse who does not have a working knowledge of nursing diagnoses that are the basis for selection of interventions to achieve health outcomes may have a difficult time independently implementing those nursing care interventions.

The Colorado Council on Nursing Education and the Colorado Trust have developed the 1990 Colorado Nursing Articulation Model. This model permits nurses to progress from LPN to associate degree RN and allows associate degree or diploma RNs to advance to the BSN without testing. Through voluntary cooperation and agreement, all thirty public and private nursing schools in Colorado developed this model. The competency statements for nursing roles include the following statements.

> The scope of nursing practice today includes many roles and requires various levels of educational preparation.
>
> The practice of nursing uses the process of assessment, analysis, planning, implementation and evaluation. The process requires the integration of cognitive, affective, and psychomotor skills. Practitioners with an extensive knowledge base will have the ability to assess and analyze information, make judgments and assume responsibility at the more advanced level. Conversely, practitioners with a less extensive knowledge base will assess and analyze information, make judgments and assume responsibility at a more basic level.

The following outline quotes activities of the LPN in the second and third steps of the nursing process from the Colorado Nursing Articulation Model, under the "Provider Role."

Analysis	Identifies from the data base common needs and problems and assists in formulating short and long term goals with the client, patient, or family.
Planning	Assists in development of individualized nursing care plans with the client, patient, family and other health care providers utilizing the data base (12).

Wilkinson (1991) writes a nursing process text with a critical thinking approach. She declares that, "A truly educated person is able to use critical thinking to *do* something with the information she has acquired . . . Because of the nature of their discipline and the nature of their work, nurses must be educated people—critical thinkers" (27). Wilkinson asserts that the application of knowledge of general principles to a specific client is a critical thinking skill. She identifies the relationship between critical thinking and each step of the nursing process. For the assessment step she states that the ability to "*distinguish relevant from irrelevant information* is a fundamental skill of critical thinking, upon which the other critical thinking skills . . . are built" (28). For the diagnosis step Wilkinson says, "*Finding patterns and relationships and making sound inferences* is an important critical thinking skill; it is the main skill used in making nursing diagnoses" (29). Table 5 on page 73 has been adapted from Wilkinson (1991:29).

Table 5

Critical Thinking Throughout the Nursing Process

Nursing Process	Critical Thinking Skills
ASSESSMENT	Observing Distinguishing relevant from irrelevant data Distinguishing important from unimportant data Checking data to make sure it is accurate Organizing data, usually according to a nursing theory Categorizing data
DIAGNOSIS	Finding patterns and relationships, "putting the puzzle together" Making inferences, assigning meaning to data Stating the problem Suspending judgment when data is insufficient
PLANNING	Generalizing Transferring knowledge from one situation to another Developing goals to measure the effects of treatment Stating interventions that are assumed to be effective
IMPLEMENTATION	Applying knowledge Trying the interventions
EVALUATION	Deciding if assumptions about the interventions are correct Evaluating the accomplishment of goals

Gross, Takazawa, and Rose, from the University of Hawaii, researched the impact of nursing education on student's critical thinking abilities as measured by the Watson-Glaser Critical Thinking Appraisal. The study showed that nursing education is effective in improving critical thinking skills. One of the assumptions made in relation to this study is that, "the nursing process is an analytical process defined in the established steps of problem solving which are aspects of critical thinking. . . . Learning experiences throughout the nursing curriculum are designed to help students develop critical thinking skills in carrying out the nursing process" (1987:317).

Gross, Takazawa, and Rose suggest that critical thinking may be closely associated with problem solving. Yinger (1980) proposes that all complex thinking combines creative and critical aspects. The proportions of each kind of thought may vary with the situation and with the individual. The production of ideas is the result of creative thinking while the evaluation of the ideas is the result of critical thinking. Berger (1984) discusses thinking processes related to nursing. Burger says that there is little doubt that the behaviors that comprise critical thinking are the crux of nursing diagnosis and thus the nursing process. Orem (1985:25) states, "Nurses must be able to think nursing as well as perform the operations of nursing practice. Nurses who do not develop the ability to think within a nursing frame of reference may tend to be task-oriented, viewing persons who require nursing as objects on which work operations are performed."

Carpenito, (1992) comments that one of the ways the term nursing diagnosis is being used is in the "context of problem identification (critical thinking)" (6).

Paul (1990) writes extensively about critical thinking and founded the Center for Critical Thinking and Moral Critique at Sonoma State University in California. Paul analyzes Bloom's Taxonomy of Educational Objectives and criticizes parts of it. However, he also makes several comments that relate critical thinking to concepts found in the Taxonomy, that are relevant to nursing education.

> A generation of teachers have now come of age not only familiar with and acceptant of the general categories of the Taxonomy, but also persuaded that the Taxonomy's identified higher-order skills of analysis, synthesis, and evaluation are essential to education at all levels (423).
>
> "Knowledge" [in Bloom et al.] is analyzed in such a restricted way and the relationship of the categories is assumed to be hierarchical in only one direction. For instance, according to Bloom's Taxonomy, "comprehension" presupposes "knowledge", but "knowledge" does not presuppose "comprehension". The second of these conceptual decisions would be questioned by those who hold that the basic skills and dispositions of critical thinking must be brought into schooling from the start and that for any learning to occur, they must be intrinsic to every element of it (425).
>
> Achieving knowledge *always* presupposes at least minimal comprehension, application, analysis, synthesis, and evaluation. This counter-insight is essential for well-planned and realistic curriculum designed to foster critical thinking skills, abilities, and dispositions (427).

Paul accepts the categories of the Taxonomy of Educational Objectives and he also believes that all the categories should be present at all levels of education. He does not agree that the categories build on one another in only one direction.

This section of the review of the literature has summarized the history of the California Education Code requirement that critical thinking be included as a part of the coursework for all associate degree college classes. Critical thinking has been compared with nursing diagnosis and both concepts have been related to nursing education and nursing practice. Finally, a contemporary view of critical thinking has been compared with the views expressed in The Taxonomy of Educational Objectives (Bloom et al, 1956).

Nursing Diagnosis in the LBCC VN Program

The faculty of the LBCC vocational nursing program actively supports the concept of a career ladder in nursing and encourages students to plan on continuing their education in nursing. Vocational nursing students are on the second step of a career ladder. The first step in the LBCC career ladder is the nurse aide program at Polytechnic High School in Long Beach. This program articulates by contract with the vocational nursing program. From the vocational nursing program, graduates may enter the second year of the registered nursing program. From the registered nursing program, the students are accepted into the third year of the baccalaureate nursing program at California State University at Long Beach.

In 1988, the faculty of the registered nursing program decided to adopt Orem's Self-Care Deficit Theory of Nursing. After several months of study, the VN faculty determined that Orem's theory would mesh acceptably with the philosophy and objectives of the vocational nursing program. Also, the faculty was concerned that many of the vocational nursing students need to be adequately prepared to continue on the career ladder in the registered nursing program. Therefore, the faculty embarked on a major curriculum change to incorporate Orem's Self-Care Deficit Theory of Nursing.

The faculty had been using nursing diagnosis, almost incidentally, since the early 1980s, primarily because it appears in course texts. During the negotiations involved in the major curriculum change, the Board of Vocational Nursing accepted the following curriculum objective: "4. Assess unmet universal self-care requisites, developmental self-care requisites, and health-deviation self-care requisites, collaborate in formulating nursing diagnoses, and writing nursing care plans for stable clients in ambulatory and in-client care facilities." (See Appendix H, page 279 for a list of all the "Curriculum Objectives.") Thus, "collaborating in formulating nursing diagnoses" was formally encoded in the vocational nursing program.

In 1990, the faculty adopted the third edition of Care Planning Pocket Guide: A Nursing Diagnosis Approach by Lederer, et al. (1990). This text uses an alphabetical arrangement to classify nursing diagnoses. Thus, the nursing diagnoses may easily be integrated into any existing theoretical framework. The authors wrote the text in a particularly lucid style and it became very popular with both faculty and students. The faculty wanted to use nursing diagnosis as an organizing principle for nursing care; adopting the Lederer text made this desire a reality. After the first year's experience using the Lederer text, the faculty concluded that they could not teach nor could the vocational nursing students learn to implement all the nursing diagnoses that had been identified by the North American Nursing Diagnosis Association. They then began the process of shortening the list of nursing diagnoses that should be taught in the vocational nursing program. The faculty based the selection process on several premises. The students do not have class work or clinical experience in specialty areas; therefore, many of the diagnoses oriented toward psychiatric problems should be eliminated, along with all of the diagnoses that are most commonly seen in intensive care units, on spinal cord injury units, or in community nursing. The diagnoses must be those that are most frequently used by all nurses. They often relate to the basic physiological and psychological self-care requisites and they tend to be the diagnoses that have been accepted by NANDA for the longest time. The implementation of care to treat these diagnoses must be clearly defined in the nursing literature and should lend itself to standardization. The diagnoses must fit within the vocational nursing scope of practice. That is, they must relate to the care of a stable client. Orem (1985:189, 1991:193) adds insight to this concept.

> "The nursing focus [diagnosis(es)] is also the index or key in estimating the complexity of a nursing situation and thus in determining the kinds of nurses (e.g., level of education and training) that will be needed to meet the patient's requirements for nursing care. The complexity of a nursing situation is determined by (1) the rapidity of change in the components of the nursing focus, (2) the elements of the components, and (3) the number and kinds of relationships between the components. The complexity of a nursing situation is increased whenever the nursing focus is not clear-cut or obvious, . . . A clear-cut or obvious nursing focus is one that can be validly established by means of readily available information about the components and their relationships.
>
> The ability to develop and maintain a valid nursing focus in nursing practice is directly related to the nurse's educational preparation and experience. . . . Because of their educational preparation, some nurses are not prepared to design, establish, and maintain a valid system of nursing for a patient without the supervision of a nurse with advanced preparation and experience. These same nurses, however, may be qualified by their educational background and well prepared to work in cooperation with another nurse, or they may be prepared to care for a patient in keeping with a design preestablished and maintained by another qualified nurse.

The faculty determined that vocational nurses can be taught to make clear-cut or obvious nursing diagnoses when that process is preestablished and maintained by a registered nurse. After a careful analysis the faculty selected fifty-three NANDA nursing diagnoses to be taught during the vocational nursing program. The teachers introduced forty-seven of the fifty-three NANDA diagnoses in the first semester and taught them in greater depth during the second semester. The last six diagnoses were taught in the third semester, during obstetrical nursing and pediatric nursing. The faculty devised a simple, concrete, method of classifying the nursing diagnoses as human responses. They grouped the diagnoses as follows: Psychological, Mental, and Social Responses; Total Body Responses; Respiratory, Nutritional, Excretory, and Movement and Rest Responses. The primary purpose for the classification was to help the students in their search for specific diagnostic terminology.

After a year's experience with the shortened list of nursing diagnoses, the faculty determined that the nursing diagnoses should be classified in relation to Orem's Self-Care

Theory of Nursing. They had originally classified the diagnoses as human responses but had arranged them according to the systems used in the medical model. They decided to change the list for two reasons. There was little connection between the nursing diagnosis list and the theoretical framework of the curriculum. Also, the original list of nursing diagnoses did not fit with the revision of the ambulatory care experience that was in progress. A review of the literature resulted in the discovery of an article by Jenny, "Classification of Nursing Diagnoses: A Self-Care Approach," that appeared in both the Proceedings of the Eighth Conference on Nursing Diagnosis and in NLN's journal, Nursing and Health Care.

Jenny describes the purposes of a taxonomy and suggests that nurses should "critically examine current schemata and develop alternatives" (1989:152). She feels that educators can use a taxonomy to structure curricular content and objectives. Jenny believes that Orem's Self-Care Deficit Theory is an appropriate principle of order to use in organizing nursing diagnoses. She did a concept analysis of existing diagnoses to organize them into seven different categories: physical homeostasis, bodily care, ego integrity, social interaction, health protection, health restoration, and environmental management. Jenny explains that the major change from NANDA's Taxonomy is the substitution of self-care categories for human response patterns. "This bypasses the 'dilemma of holism.'" Nursing usually chooses to value the view of a person as a whole, rather than as body parts or functions, as is done in human response patterns. In the Orem schema, "categories of diagnoses relate to tasks and activities required for health, not to 'parts' of the person" (154). Jenny dropped five of the diagnoses accepted by NANDA and added seventeen new diagnostic categories to complete her taxonomy.

> She comments, "The challenge for any taxonomy is to serve the needs of a broad spectrum of existing nursing practice. . . . Self-care is an organizing principle that supports those human attributes and values espoused by the current nursing culture, such as personal survival, human dignity, personal autonomy, and self-determination. . . . Since nursing possesses no single grand theory, theoretical

> pluralism acknowledges the diversity of practice and offers practitioners a choice. This model increases their choices (155).

It seemed that a published taxonomy of nursing diagnoses based on Orem's theory would be the answer to the problem faced by the LBCC faculty. However, after several months of effort to mold Jenny's system to meet the needs of the vocational nursing program, the faculty abandoned the effort to use Jenny's work. One major problem was that the LBCC VN faculty did not want to add any diagnoses that had not been accepted by NANDA, and Jenny had both added and subtracted diagnoses.

Harrington (1988:93) agrees that schools of nursing must often supplement the NANDA diagnoses with "systems supportive of their school's conceptual framework." However, she argues that schools "should limit students to using the approved list [of nursing diagnoses]." Since nursing diagnoses are a "defining characteristic of nursing practice," and the "common language" of nursing, only a consistent nomenclature should be used.

Whitley and Dillon (1988:234) also provided valuable information. They supported the faculty's belief that nursing diagnoses could be used to structure courses within the curriculum. They stated, "Unlike the faculty, the neophyte has no wealth of nursing knowledge and experience for which nursing diagnosis begins to give structure. Rather, the diagnostic categories may provide the long needed structure around which the student will file and process nursing knowledge." These authors also declared that the nursing problems (diagnoses) given at the beginning of the program "cannot require the breadth of knowledge and complexity of more advanced ones."

Kritek (1986) reviewed the eleven-year history of NANDA's work to develop an appropriate taxonomy for nursing diagnoses. NANDA based some of their understanding of the nature of a taxonomy on the work of Bloom et al. (1956). Some of the principles that the LBCC faculty found to be helpful, were as follows: ordering and arrangement are based on a single principle; the principle must be consistent with sound theory in the discipline;

and ordering should reveal relationships among phenomena and the essential properties of phenomena. Kritek completed her presentation with comments about "the courage necessary to exercise creativity" and the necessity to recognize that the task was just beginning (36).

During the summer of 1991 the faculty hammered out the taxonomy that is now the keystone of the LBCC vocational nursing curriculum. They based the new taxonomy on the 1990 NANDA list of diagnoses and included fifty-six common diagnoses. During the first two semesters, the instructors teach fifty of the diagnoses; they present the last six diagnoses in the third semester. The Self-Care Taxonomy of Nursing Diagnoses, based on Orem's Theory of Nursing, with the fifty-six nursing diagnoses taught in the LBCC vocational nursing program, is found in Appendix H, on page 280.

Wellness and Prevention of Illness

The literature provides a foundation for integrating wellness and the prevention of illness into the Long Beach City College ambulatory care clinical experience. This review will first define health and then examine wellness and prevention of illness from the broad perspective. Next, nursing's agenda for health care reform will be considered. Finally, other nursing perspectives about health care for wellness and wellness nursing diagnoses will be appraised.

Definition of Health

Defining health is a complicated matter. Pender devotes the entire first chapter in her book, Health Promotion in Nursing Practice (1987), to a definition of health. It is important to define health accurately since it is the goal that is being sought by the makers of health policy, the area of study for health research, and the object for the delivery of health care. Recently, several authors have defined health as stability of a person's physical or mental being, or stability of both aspects together. Another view, that health is characterized by actualization, is proposed by Dunn who coined the term "*high-level wellness*," that he defined as

> an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction within the environment where he is functioning (qtd. in Pender, 1987:21).

Distributive health care may be contrasted with episodic health care (Flynn and Heffron, 1988). Episodic care is usually given in hospitals and is related to the treatment for an acute illness. Nursing care that is given outside of the hospital setting is usually related to some aspect of distributive health care. Distributive care is often associated with the care of clients with chronic illness. It is continuous and does not usually have definitive beginnings or endings such as admission and discharge from a hospital. Distributive care emphasizes health maintenance and disease prevention. Health teaching, counseling, and care of the sick in outpatient facilities are major components of distributive care.

National, State, and Local Perspectives on Wellness and Prevention of Disease

In September 1990, Sullivan, the Secretary of the Department of Health and Human Services, (DHHS) presents a health plan to the public: Healthy People 2000: National Health Promotion and Disease Prevention Objectives (U.S. DHHS, 1991). Sullivan believes the following three points are of great importance in improving health for the nation. (1) Individuals must assume personal responsibility for good health by taking control of factors such as smoking, use of alcohol and drugs; physical and emotional fitness; good nutritional practices; and concern for the environment. (2) The means must be found to extend the benefits of good health to "the most vulnerable among us," (v) by building a culture that actively promotes healthy lifestyles. (3) Health promotion and disease prevention provide the greatest opportunity to reduce the costs of health care and human suffering. For example, annual costs of smoking are $65 billion; costs for AIDS are $13 billion; costs for alcohol and drug abuse treatment are $16 billion, with total economic impact of alcohol and drug use being $110 billion.

Three overarching goals are proposed in Healthy People 2000. "Increase the span of healthy life for Americans. Reduce health disparities among Americans. Achieve access to preventive services for all Americans" (U. S. DHHS, 1991:43).

Nursing's Agenda for Health Care Reform

The headline reads, "RN Groups Reach Consensus on Healthcare Reform" ("RN Groups," 1991). America's nurses, who have trouble agreeing on anything, decided it was time for nurses to get together and begin to build consensus on a plan to reform health care in the United States (Gray, 1991). The leaders of two powerful nursing organizations, the ANA and the NLN, were able to compromise on plans that each had originated, and draft a unified plan. Then the state and local organizations and specialty nursing groups had a chance for input. After more than two years, the final product, a twenty-four page document, endorsed by fifty-one organizations was released during Nurses' Week in May 1991. Nursing's Agenda for Health Care Reform (1991) has some parts that are similar to other plans for reform: a combination of public and private funding, cost containment, incentives for managed care, long term care, insurance reforms, and access to a full range of "qualified providers." The unique part of the plan is that it calls for primary care offered in community based settings such as malls, schools, and mobile vans. This primary care would emphasize prevention and education of the consumers by the most cost-effective provider. Gray reports that proponents for Nursing's Agenda believe that "the physician can no longer be the sole gatekeeper to the health care system" (Gray, 1991:14). Nursing is offering to work in communities to help people take responsibility for their own health, through education, prevention, and support.

In the long term, it is predicted that the availability of primary health care to all people in the nation would provide a "health dividend." Prevention and early treatment of costly illnesses will greatly reduce overall medical expenses.

Other Nursing Perspectives on Health Care for Wellness

Popkess-Vawter (1984) believes that nurses must consider a client as a whole person when making a nursing diagnosis. The early lists of nursing diagnoses all related to problems and did not consider the client's strengths. Popkess-Vawter proposes examples of such strength-oriented diagnoses and suggests a potential process for generating such diagnoses. She feels that at each step of the nursing process, the nurse should identify the client's strengths. Since there are many possible strengths that could be listed, the nurse must use judgment to keep the list from becoming too unwieldy. Sources of strengths include such things as age, family, support systems, job, financial status, and self-care practices. This list is quite similar to the list of "Basic Conditioning Factors" suggested by Orem in 1958 (Orem, 1991:36). Popkess-Vawter goes on to list thirty-one NANDA nursing diagnoses, with positive modifiers that she considers to be potential positive nursing diagnoses. Examples of such diagnoses are Effective airway clearance, Effective family coping, Freedom from fear, Adequate physical mobility, Appropriate sensory perception, and Healthy sleep pattern. She concludes by urging nurses to avoid dwelling only on client problems and focus on strengths so that positive attitudes and hope for the future will be emphasized for every client.

Alford (1985) discusses self-care practices of older adults in an ambulatory nursing clinic. She agrees with Orem who suggested that adults are expected to be self-reliant and responsible and yet older adults are stereotyped as dependent and infirm. Alford feels that nurses' challenge when working with older adults is to "keep them as self-reliant as possible" and avoid depending on others for health care (253). Nurses can teach older adults to monitor their own health by learning to measure their blood pressure, pulse, and weight. Older adults can learn to use biofeedback, acupressure, and relaxation techniques. They can learn to exercise, to eat a healthy diet, to recognize signs of bodily dysfunction, and to have a positive outlook. The clients at Alford's center come for a "wellness visit" so that the staff can identify the clients' health strengths and weaknesses, and determine what to do about the weaknesses. The clients may receive one-to-one health teaching, family teaching, or group teaching to strengthen their health orientation and learn how to use the health system more effectively.

Alford describes the relationship between doctors and nurses in her nursing centers.

> As nurses in primary care, we too refuse to "take orders" from physicians or any other person. One profession does not "order" another profession to do anything. What we do is request from the physicians their medical recommendations for their patients who are our clients. The medical plan is incorporated into the nursing care plan (not the other way around), and if the medical plan is incongruent with the needs and wishes of the client, the physician is asked to modify the plan, or the client is instructed to discuss modification with the physician (260).

Alford concludes by suggesting that nurses need more schooling in gerontologic nursing so that they can design and implement systems of health care for older adults. "This is what makes nursing so exciting—the ability to help someone help him- or herself to achieve as optimum a level of wellness as possible in light of limitations. There is nothing so rewarding as facilitating and supporting older persons in the management of their own health and well-being . . . (260-61).

Fehring and Frenn (1986) describe the Wellness Resource Center developed by the Marquette University College of Nursing and opened in October 1982. This center, managed by nurses, is based on a nursing model of health, promotes self-responsibility, uses nursing diagnoses, relies on health education, and allows clients to have direct access to the services of a professional nurse. The center is housed in a local church and operates in conjunction with a committee from the church. The nurses at the center use self-care as a conceptual focus. They have added spiritual well-being to Gordon's functional health patterns and use this tool to assess client needs. Also, they have developed a self-health assessment form, a physical assessment form, a nursing diagnosis problem page, and a progress notes form.

The services of the center include health screening and consultation, nutritional assessment and maintenance, stress management, community and medical referral, and spiritual health services. Common client problems seen in the center relate to blood pressure measurement, self-breast examination, restricted diets, coping with pain, unemployment, sleeping problems, and family problems. Nursing protocols to use as guides for assisting clients to resolve these problems are being developed. Future plans include continuing to refine the nursing diagnostic process, developing more protocols for treatment, evaluating the effectiveness of the treatments and referrals, and determining cost effectiveness of the Wellness Resource Center.

Duespohl (1986) develops a manual of nursing diagnoses for the well and ill client. She uses the nursing diagnoses accepted by NANDA and states that "in most instances each nursing diagnosis (diagnostic category and etiology) can apply to both well and ill clients . . . [so] the content under each nursing diagnosis is divided into wellness oriented and illness oriented portions" (6). Duespohl organizes the wellness nursing diagnoses under six client responses and situations: developmental, emotional, environmental, maturational, physiological, and situational. She classifies illness oriented nursing diagnoses under seven client responses and situations: general illnesses, acute problems, mental health, mobility, nutrition, physical health, and biologic systems problems. She devotes approximately one fourth of her handbook to this indexing function. The remainder of the book is an alphabetical listing of each of the accepted NANDA nursing diagnoses with a list of wellness oriented and illness oriented situations that may evoke that diagnosis.

Houldin, Saltstein, and Ganley (1987) also offer a small handbook of nursing diagnoses for wellness. They propose that these diagnoses should be used to prescribe interventions and learning activities for both the well and ill client to support their strengths.

These authors organize the book according to Gordon's functional health patterns (1982), recognize the client as a whole person, and use nursing interventions to promote health and prevent illness. Houldin, Saltstein, and Ganley suggest that the nurse use the usual steps of the nursing process and the accepted pattern of stating a nursing diagnosis: statement of health status followed by the contributing factors. These authors have listed thirty-three commonly identified factors that contribute to wellness. Examples of these factors are realistic self-concept, accurate perception of reality, ability to express feelings, effective social environment, physical capability, effective management of stressors, availability of adequate resources, and internal locus of control. About half of the book is devoted to outlines of wellness diagnosis statements, contributing factors, and defining characteristics. Examples of typical wellness diagnoses are optimal nutritional status; adequate bowel elimination; effective respiratory function; sleep quality, duration, and frequency appropriate to support wellness; potential for coping with diminished sensory ability; positive self-esteem; adequate sexual function; and spiritual strength. The book concludes with ten care plans and a data-base assessment guide.

Smyth (1987:77) examines ethical issues nurses must face in the delivery of care in ambulatory settings. She declares,

> In ambulatory settings nurses experience a constant tension because of the demands placed on them to achieve both institutional and professional goals. This tension is created because nursing accountability for the care of clients demands individualized care that is wellness focused and includes the family. However, institutions hold nurses accountable for the cost effective processing of patients, which usually results in an episodic versus holistic approach to care.

Smyth suggests the nurse-managed clinic as an alternative model for the delivery of ambulatory health services. Here, nurses and consumers can mutually share control and nurses can avoid the "divergent professional ideology" (78) expressed as "diagnosis and treatment versus care and health promotion" (78).

Smyth suggests that the health care needs of all individuals in society can be subsumed under five categories (79).

1. adequate nutrition and shelter;
2. sanitary and safe living and working conditions;
3. healthy lifestyles through exercise, rest, and other features;
4. preventative, curative, and rehabilitative personal medical services; and
5. nonmedical personal and social support services.

Smyth believes that "A more equitable access to and delivery of the professional resources of the physician and the nurse in ambulatory care settings, in accordance with the theory of distributive justice, are needed" (79). To accomplish this goal, cooperation rather than "collaboration, competition, or power over" (80) could evolve. Smyth believes that formal agreements are not necessary, but structuring interactional "nurse—physician dyads" could promote such cooperation (80). She asks, "Is the cooperation model too idealistic to ensure equal access and fair distribution of the valued resources of professionals?" She answers that "If the interaction is likely to last a long time, and if the players care enough about their future together, the conditions are ripe for the emergence and maintenance of cooperation" (80).

Moccia (1989) writes about trends for the nineties. She believes that the opportunity is presenting itself for nurses to assume leadership in managed care arrangements that will continue to be the dominant mode of care for the nineties. She states, "One trend that is emerging is the ever quickening decline of acute care empires" (16). This leads to the question, "How, then, to reeducate the majority of nurses for out-of-hospital careers?" "Who will assist faculty and administrators in hospital-based schools of nursing?" Moccia comments that there is no denying past disagreements but there is a growing understanding that each level of nursing education provides "a unique and invaluable community service in assuring quality health care" (16). The interdependence among subsystems will grow as graduates enter and exit several times in their careers. "How then can the individual be educated best for lifelong learning?" Moccia continues with an analysis of public health trends.

> No trend has such awesome implications as the deteriorating public health of our country. All we have ever known about how to keep a people healthy has been

> blatantly ignored by the social and economic policies of the last eight years. . . . Theories and practices that acknowledge the relationship between health and clean air and water, adequate housing, nutrition, education, and meaningful employment have been abandoned. . . .It's not a question of whether nursing should address continuing health problems. Instead, these questions remain: Where? When? Why not sooner (17)?

In 1990, Pender makes proposals for developing the language to describe a "health perspective." She acknowledges that health promotion has emerged as a national priority and that nursing curricula are increasingly cast in a wellness rather than an illness model. Since the field is so new, she feels that the development of multiple classificatory systems should be encouraged. She suggests an infrastructure to frame the "dimensions of [a] health-promoting life-style: health monitoring and self-responsibility, nutrition and weight control, exercise, stress management and sleep, sense of purpose and self-actualization, and interpersonal support" (33). Pender feels that diagnosis has traditionally referred to disease conditions so it will be difficult to change the perception that a diagnosis is a "problem." She proposes two different approaches for "developing knowledge representation systems with a health perspective" (34). The first would use *diagnostic* terminology and would consist of "two parallel, complementary taxonomic systems," one for "potential/actual health/illness problems;" the other for "human strengths and resources" (34). The second would be similar to that proposed by Houldin, Saltstein, and Ganley, a "*classification* of human strengths" (34). She also suggests an integrated system similar to that used in the American Psychiatric Association's *Diagnostic and Statistical Manual (DSM-III)*. All of these systems have advantages and disadvantages. However, a team of nurse scientists with computer experts and input from other fields such as biology, sociology, psychology could develop a system that would serve as a prototype for all the health professions.

Popkess-Vawter (1991) comments on ways the newly adopted definition of nursing diagnoses provides an opportunity for a wellness perspective to be incorporated into the nursing diagnosis movement. Popkess-Vawter believes that the second half of the new definition "responses to actual and potential health problems/*life processes*" (NANDA, 1990) includes a wellness perspective, albeit in a global way. She lists four nursing diagnoses in the present taxonomy that are wellness oriented: "*anticipatory grieving, effective breastfeeding, family coping: potential for growth*, and *health seeking behaviors*" (19). Popkess-Vawter identifies nurses who have written papers in favor of wellness diagnoses and those who are against their inclusion in the NANDA taxonomy. She gives examples of the ill—well client, and the well—ill client. The latter "often do not have a pleasurable and purposeful balance among the biologic, psychologic, social, and spiritual aspects of their lives" (23). Popkess-Vawter suggests that nurses who work with clients who are pregnant, have well babies or children, are elderly, or stressed need wellness diagnoses and now NANDA has mandated the development of these diagnoses.

In 1991, de Tornyay describes a fifteen-year action agenda for the nation's health professional schools and colleges. The PEW Charitable Trusts Foundation funded the research for developing this agenda. Three of the items for nursing schools are particularly relevant to a discussion of wellness and prevention of illness.

- Reorient the teaching-learning process to promote problem-solving skills and the ability to manage large volumes of information.
- Shift the patient care training setting from inpatient to ambulatory/community-based centers that emphasize prevention, the management of chronic diseases, and the importance of patients' general social needs.
- Change the orientation of the health professions from illness to health (4).

Field (1992) writes a news report about a speech by Ada Jaycox, at the Ninth (1992) NANDA Conference. Jaycox is the co-chair of the committee responsible for the recent publication, *The Clinical Practice Guidelines for Acute Pain*, released by the U. S. Agency for HealthCare Policy and Research.

During her presentation, Jaycox challenges the nurses at the conference to "Be as bold and aggressive as you can be in the naming and claiming that which is in nursing's domain . . . to do less will limit opportunities to move nursing and nurses forward" (Field, 1992:4). In trying to describe what is uniquely nursing, nurses have overstated the separateness and have created an artificial picture of nursing.

Jaycox charged the NANDA leadership to make decisions that will guide how nursing diagnosis, and therefore nursing, is understood over the next twenty years. Nurses must make choices about using language that communicates clearly with others and having a taxonomy that is general enough to encompass multiple theories of nursing. Jaycox encourages NANDA to be broadly "inclusive" in making these choices.

She offers the suggestion that "a broad organizing framework such as the Nursing Minimum Data Set . . . may be a sufficiently neutral framework in which to organize much of nursing. Nursing diagnosis should include all parts of the human body, all psychosocial and physiological theories, all phases of the wellness-illness continuum, and be applicable to all professional nurses. . . . If we err in defining our domain, let us err in being too broad, not too narrow!" (Field, 1992:5).

Nursing Practice in Ambulatory Care

The review of the literature related to nursing practice in ambulatory care provides a foundation for the nursing content of the students' clinical experience in ambulatory care. It is not easy to ascertain the nursing skills that should be included in such a student experience. The role of the registered nurse has been in transition since the mid 1960s. Registered nurses manage some ambulatory care facilities, while other ambulatory care facilities are still dominated by the medical model and nurses have a very traditional role. Most ambulatory care facilities have melded the two foci and are somewhere between the two extremes. The review of this section of the literature will trace the changes in ambulatory care nursing and will also delineate the required job skills.

The needs of the clients have changed too. They are being discharged from hospitals much earlier while they are still in the early stages of recovery. They have become sophisticated consumers who wish to know more about how to care for themselves. Also, many of the health care consumers are older persons with chronic illnesses, who with appropriate health care, can be assisted to cope with their illnesses so that they can continue to care for themselves for many years. Without such care, many have repeated hospitalizations that can be physically and economically devastating.

Trends in Ambulatory Nursing Care

In 1990, to celebrate the twenty-fifth anniversary of nurse practitioners, the Journal of the American Academy of Nurse Practitioners reprinted a classic manuscript that was written in 1967 by Lewis and Resnik. This manuscript describes a study done at the University of Kansas that compares physician delivery of ambulatory care to chronically ill, adult clients with care delivered to a similar population by nurses. After a year, there were significant decreases in the frequency of client complaints, a reduction in the number of requests to see physicians for minor complaints, and a marked preference for having nurses do certain procedures or functions. The question arose, was the care given by the nurses nursing care or was it medical care? The answer that evolved is that "when multidisciplinary care is rendered, it is essential to focus primarily on the needs of patients" (44).

After a brief transitional period, the clients accepted the nurse as their primary source of care and were not concerned with whether she was providing nursing care or medical care. These clients were no longer acutely ill, requiring the technical expertise of a physician. They needed to learn self-care. The goals for their care were health education, health promotion, and prevention of disease. The nurse provided a new kind of scientific nursing care that met those needs. The results of the study showed that the nurse was accepted as a primary caregiver, clients kept their appointments more frequently, time was better utilized, the overall cost of the nurse as a provider was less, and the quality of care and client satisfaction was higher. The authors admit that there are significant problems in initiating interprofessional programs of client care, but they recommend that a system of progressive care be implemented for chronically ill ambulatory care clients.

In 1981 Verran studies the nature of the service nurses provide in ambulatory care. She defines seven "domains of ambulatory care nursing: patient counseling, health care maintenance, preventive care, primary care, patient education, therapeutic care, and normative care" (2). Health care maintenance relates to clients' wellness needs. Primary care includes screening for specialized referral, physical assessment, and follow-up of medical health needs. Therapeutic care is clients' direct physical care and monitoring under the direction of the physician. Normative care encompasses the traditional entry and exit procedures, preparation for examination, and direction or transportation to other care givers. Verran uses the Delphi technique to elicit information about the duties of ambulatory care nurses, from the nurses themselves. After the first round of the Delphi technique, Verran adds an eighth area, non-client centered care and after the second round, she included preventive care in the area of health care maintenance. After four rounds, Verran elicits consensus on forty-one areas of direct client care and four areas of non-client centered care. The staff experts had the greatest difficulty with the areas of primary care, and normative care. Primary care is the newest area to become a nursing responsibility and may not be completely accepted by the nurses. Normative care or "gate keeping" is the oldest responsibility of nurses and is an area that nurses may consider less acceptable as a professional responsibility. The tasks delineated in Verran's study are below.

Patient Counseling
Client advocacy
General support
Clinic procedures
Terminal/chronic illness

Health Care Maintenance
General assessment
Follow-up assessment
Provide information
Preventive care instruction

Primary Care
Referral
Triage
Protocol care
Physical
History

Patient Education
Health care maintenance
Illness/condition program
Home care instructions
Plan of care

Therapeutic care
Surgical preparation
Respiratory treatments
Irrigations
Applications
Specimens
Measurement
Appliances
Recovery
Invasive
Noninvasive
Dressings
Medications
IV medications
Blood and IV therapy

Normative Care
Directing [traffic]
Transporting
Communication
Chaperoning
Assisting
Preparation
Documents
System
Comfort
Coordination

Non-client Care
Maintenance
Training
Materials
Updating

Verran suggests that this taxonomy may be used to assess applicants for staff selection, to prepare a unit orientation guide, and to design a staff evaluation tool. Nurse managers could use the taxonomy to classify ambulatory care clients, derive clinic staffing patterns, and plan ratios of professional to non-professional nursing staff.

Hastings (1987a), from the National Institutes of Health (NIH), clarifies classification issues in ambulatory care nursing. She declares that the requirements and time frames for ambulatory care nursing encounters are so different from inpatient systems that using traditional ways of measuring nursing care are only frustrating. In hospitals, clients receive nursing care as a part of their contract with the institution and give up much of the responsibility for self-care. In ambulatory care settings clients are expected to manage their own self-care. The existence of their knowledge deficits or skill limitations creates the need for nursing care. Ambulatory care clients have the choice of whether to keep their appointments, they have less well defined problems, nursing observations are necessarily brief, and the follow up has an indefinite beginning and end. Hastings compares inpatient and outpatient nursing workloads. She states, "In every instance, the structure in ambulatory care is more diffuse, less controlled, and less predictable than in acute care" (52). NIH developed a system that placed ambulatory patients into one of six patient care categories based on the duration of time for a visit. However, because of rapid turnover of clients, ambulatory care nurses must spend a large percent of their time in telephone activities, preparation, and documentation. Hastings points out that "patient characteristics and nursing role together determine the demand and scope of ambulatory nursing services" (60). She suggests that nurses study ways to refine both client classifications and nursing care. Such studies will provide the tools so that efficient staffing patterns for ambulatory care can be established.

Hastings (1987b) also describes a system for measuring quality of ambulatory nursing care at the National Institutes of Health. Ambulatory care is one of the few expanding areas in health care that provides a special opportunity for nurses. Hastings states,

> The question of what a professional nurse does, as opposed to LPNs, technicians, and primary care providers, is difficult to resolve in view of the unstructured nature of the ambulatory care setting. Since it is clearly not realistic, necessary, or cost-effective for every patient in an ambulatory setting to be under the care of a professional nurse at every visit, there are decisions that continually have to be made about the allocation of care, level of care to be provided, and appropriate follow-up interval (13).

In 1987 Koerner writes a paper to "address trends, issues, and problems for nurses in the health care arena in order to better clarify the role of nursing in ambulatory care" (2). She describes a typical scenario in an ambulatory care facility where the client arrives, waits, has his weight and blood pressure checked by a nurse, is escorted to an examination room, waits, sees the doctor briefly, sees the secretary for another appointment and any follow up tests, and goes on his way. She declares:

> this model of health care delivery uses nurses as task-oriented, assembly-line workers who process a designated number of patients in a series of 15-minute appointments. It is a system that emphasizes the traditional values and roles of the 19th century . . . this old, functional model of care leads to low morale and decreased productivity among nurses. (2)

Koerner explains that this situation results from "traditional physician's leadership and nursing's failure to do necessary organizational politicking to redefine and actualize a more professional role" (2).

Koerner proposes a new model of ambulatory care in which the nurse is a "collaborative partner with the physician" (3). Within this role the nurse's role should include: "health assessment and screening; health education; health promotion and disease prevention; clinical decision making for the nursing plan; relevant information sharing for the medical plan; and care coordination with the patient, family, and other providers" (3). Koerner feels that particularly in a teaching clinic where physicians rotate, and the nurses regularly interact with the patients, the success of an ambulatory care program may well depend on the nurses assuming this professional patient-centered role. Nurses must assess and document their profitability to the organization and present nursing service as a marketing tool and source of revenue. Koerner concludes by challenging ambulatory care nurses to "take a leadership role and issue a definitive position paper on the education, certification, and scope of practice for professional and technical nurses for the twenty first century. . . . The future of nursing lies in the ability of ambulatory nurses to energize their practice and to take risks" (6). The question remains: will nurses continue in their traditional gate keeping role, or will they risk assuming a professional, health care provider role?

In 1988 Johnson and McCloskey began editing a series of books on nursing administration. In the first volume, Murphy describes the evolving role of the nurse in ambulatory care. Murphy, a chapter author, comments that the field is undergoing constant expansion and the nursing role is not fixed and static. She describes the traditional clinic nurse as "a traffic director, making sure patients kept their scheduled appointments, in an assembly line operation. . . . sorters of reports, technical shot givers . . . clerical [workers] and physician's helper" (49). A new nursing role is emerging. A factor in this process is the emphasis that the World Health Organization has given to nursing as an independent and collaborative health service in developing countries. Ambulatory nursing is now including health education, health maintenance, preventive care, primary care, and planning. "Ambulatory care has been moving toward comprehensive patient care, and providing comprehensive care has been the major characteristic of the expanding role of the ambulatory care nurse" (50). Murphy summarizes the work of Verran and Tighe et al. and suggests that this taxonomy is an appropriate basis for developing the role of the ambulatory care nurse. She also highlights the American Academy of Ambulatory Nursing Administration standards for care published in 1987. She concludes, "Over the past thirty years ambulatory care nursing has evolved from an after thought appended to inpatient nursing to a self-confident field essential to total patient care. . . . The nursing role in ambulatory care today can be defined as a role in transition" (57) Will there be a new definition in ten years? "The answer depends on the actions of ambulatory care nurses and the degree to which they seize the opportunity currently before them" (57).

Parrinello, Brenner, and Vallone (1988:58) develop a nursing patient classification instrument based on Verran's Taxonomy. They use the Delphi method to refine Verran's list and make it applicable to the ambulatory care setting at the University of Rochester Strong Memorial Medical Hospital. The part of the study most applicable to a vocational nursing clinical experience in ambulatory care is the revised list of nursing interventions with percentages of encounters handled by RNs, LPNs, and NAs. This information is reproduced in Table 6 on page 97, with the LVN category shading added.

Joseph (1990) also generates a tool to quantify nursing activities in the outpatient department. She uses the work of Verran, Tighe, Hastings, Parrinello, Brenner, and Vallone, in developing an instrument specific to the needs at the San Diego Veterans' Administration Medical Center (SDVMC). The tools developed by earlier investigators were used to classify patients, whereas the SDVMC instrument was created to gather data. At this facility, there are no nurse practitioners, so the investigator deleted primary care from her instrument. In her new taxonomy, Joseph (1990:28) specifically includes "clinical documentation," "other," and "personal time," and summarizes a total of forty-seven activities. She rearranged these activities into direct care, indirect care, unit-related time, personal time, and other time.

Joseph says that the findings of this study may be applicable to other ambulatory care departments. But, her suggestion may need to be carefully weighed. Licensed vocational nurses have twelve to fifteen months of education and they carry the responsibilities of licensure. The preparation for nursing assistants may range from on-the-job orientation up to a maximum of nine weeks of job training. In this study the investigator categorized the two groups together. Since there were five licensed vocational nurses and only one nursing assistant, Joseph's decision to combine two levels of staff may not have

Table 6

FREQUENCY OF NURSING INTERVENTIONS PERFORMED

Intervention	Frequency	Percentage of all encounters (n - 5,022)	Percent frequency performed by		
			RN	LPN	NA
Measurement	2,880	57.3	45.4	11.4	43.2
Specimen collection	1,451	28.9	39.8	24.5	35.7
Follow-up nursing assessment	1,244	24.8	97.3	2.7	
Comfort	607	12.1	44.6	27.3	28.1
Coordination	581	11.6	84.4	6.5	8.8
Preparation: surgical and non-surgical	541	10.8	82.4	11.5	6.1
Retrieval and review of reports	474	9.4	74.9	9.3	15.8
Medical care instructions	412	8.2	86.9	9.5	3.6
Invasive or complex noninvasive procedures	370	7.4	70.3	4.9	24.8
Assisting	276	5.5	65.2	21.0	13.8
Dressings and topical applications	248	4.9	85.1	13.3	1.6
Emotional support	244	4.8	84.0	9.5	6.5
Triage	208	4.1	93.3	2.9	3.8
Health care/preventive instructions	202	4.0	100.0		
Medication	128	2.5	100.0		
Ambulatory care system	83	1.6	68.7	3.6	27.7
Communication	71	1.4	57.8	36.6	5.6
Directing	69	1.4	78.3	1.4	20.3
Referral	66	1.3	100.0		
Recovery	57	1.1	77.2	22.8	
General nursing assessment	43	0.86	100.0		
Eligibility screening	37	0.74	83.8	2.7	13.5
Transporting/escorting	36	0.72	77.8	5.5	16.7
Physical assessment/monitoring	30	0.60	80.0	20.0	
Chaperoning	26	0.52	65.4	19.2	15.4
Complex individualized instructions	26	0.50	100.0		
Patient advocacy	23	0.46	91.3	8.7	
IV therapy	11	0.22	100.0		
Formal health care program	9	0.17	100.0		
Appliances	9	0.17	100.0		
IV medications	7	0.13	100.0		
Comprehensive history	4	0.07	100.0		
Blood therapy	2	0.03	100.0		
Complete physical	0	0.00			

affected the results of her study. However, in a larger ambulatory care facility with more nursing assistants, it might be inappropriate to categorize the two groups as one. Also, LVNs are qualified to give medications. Not permitting the LVNs at SDVMC to administer medications means they are being under utilized. However, federal rules control Veterans' Administration Hospitals, rather than state regulations, so SDVMC may have no choice in the matter.

For the study, four observers monitor the activities of seven registered nurses, five licensed vocational nurses, and one nursing assistant, over a period of six days. The activities of the registered nurses did not differ greatly from the activities of the vocational nurses and nursing assistant. The registered nurses spent 41.6% of their time in direct care and 29.5% in indirect care, while the vocational nurses and the one nursing assistant spent 45% of their time in direct care and 22.8% in indirect care. Joseph's (31) results showing the relative percent of time spent in various activities are shown in Figure 2, below.

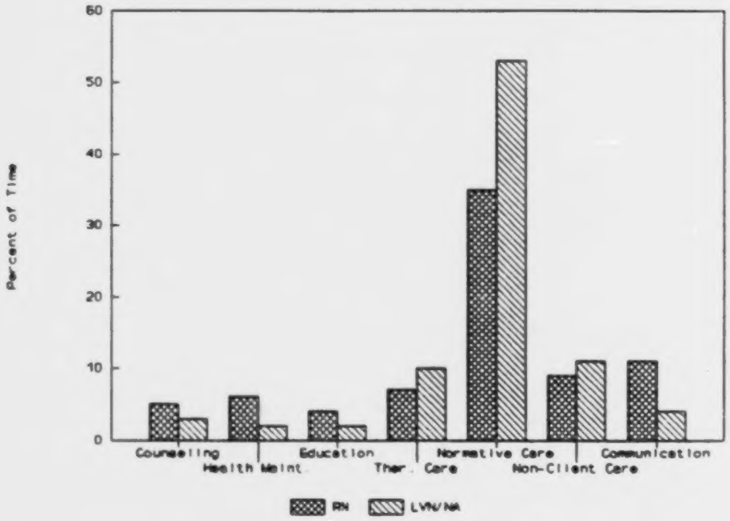

Figure 2

Activities of RNs and LVNs

Joseph states that "the data substantiate the traditional LVN/NA role as direct caregivers who facilitate normal entry and exit of patients from the clinic" (32). If the clinic needs a staff person to direct patients and assist with completing basic nursing procedures, staffing with a licensed vocational nurse or nursing assistant would be appropriate. In most instances the use of both registered nurses and vocational nurses or nursing assistants is necessary.

Moore and Geving (1990) write about nursing's role in the ambulatory care setting at Virginia Mason Clinic (VMC) in Seattle. One of the unique aspects of the program at VMC is a joint venture with a vocational technical program to prepare medical office assistants. This program uses VMC for the students' clinical practicum. "This program merged the didactic curriculum and clinical practicum for medical office assistants on site at VMC. This approach allowed VMC to tailor the curriculum and clinical experiences to meet the organization's needs" (23). This means that the clinic can recruit from a pool of graduates who are already oriented to facility. "The results of the program have been very favorable and similar training experiences are planned for nursing students" (23).

The facility has developed a career ladder with three steps of advancement for medical assistants and offers competitive salaries and insurance, with an attractive benefits program that provides day care for children, and tuition reimbursement.

The authors present this plan as one that is mutually beneficial to the organization and the students. However, before such a plan is implemented for nursing students, the faculty of the school need to consider the disadvantages of "training" students to meet the needs of one particular organization, as well as the problems of educating students when the curriculum is planned by the health care facility rather than by an educational institution.

Skills Used in Ambulatory Care Nursing

Knutson (1989), and a group of ambulatory care nurse practitioners and nurse managers are the authors of a book Ambulatory Care Nursing Standards and Performance Evaluations. The Medical Group Management Association, a professional association of physicians involved in group practice, publishes the book through their research arm, The Center for Research in Ambulatory Health Care Administration. The nurse authors present core characteristics, standards, and performance evaluation for eight levels of ambulatory care nursing personnel, beginning with medical office assistant and ending with administrative nurse manager. Knutson and her colleagues offer the following definition for the practical nursing level:

> A licensed practical nurse is a nursing service employee who, in the ambulatory care setting, provides basic nursing care which includes performing routine office procedures and testing, participating in patient teaching, communicating effectively with others, and participating in decision making" (1989:19)

The requirements for this position are graduation from an accredited school of practical nursing, current state licensure, and completion of an approved pharmacology course. The authors have used clinical practice, technical and ethical competence, and leadership to describe the characteristics of the vocational nurse. The major headings for this outline are quoted below.

> **Clinical Practice**
> A licensed practical nurse uses the nursing process—assessment, planning, implementation, and evaluation—under the supervision of the RN or licensed physician to provide continuing health care to individuals, families, and community.
> A. Identifies common and recurring nursing needs of the patient.
> B. Recognizes the need for and performs routine office procedures and testing in the ambulatory care setting.
> C. Assists patients to achieve basic health care goals.
> D. Identifies patient education needs, provides instruction or refers appropriately.
> E. Documents observations, actions, and patient outcomes.
>
> **Technical and Ethical Competency**
> This includes knowledge, self-direction, accountability, and ability to function within institutional policies, philosophies, and procedures.
> A. Demonstrates patient advocacy which assures patients' rights to privacy, safety, and confidentiality.
> B. Maintains current practice by selecting appropriate avenues for technical growth.
> C. Maintains accountability which includes efficient use of time and materials. Practices within medical group policies and philosophies.
>
> **Leadership**
> Leadership is a process through which an LPN affects the actions of others through appearance, conduct, and practice.
> A. Serves as a catalyst in improving standards of LPN practice.
> B. Demonstrates leadership skills through the ability to set and attain goals.
> C. Serves as a role model for technical conduct and practice.
> D. Provides support to professional and technical staff. (19-21)

The American Academy of Ambulatory Care Nursing Administration (AAANA) was founded in 1978. Ambulatory care administrators from hospital-based clinics, HMOs, group practices, health departments, ambulatory surgery centers, and similar organizations make up the membership. In 1987, the organization published the second edition of their book, Ambulatory Care Nursing Administration and Practice Standards, written by Hastings et al. The philosophy of nursing espoused by the organization includes the following concepts:

> Every person has a basic right to optimal health and to comprehensive health care that is available, accessible, and acceptable. By building on individuals' strengths, the nurse assists them to better health, while allowing them to retain responsibility for their own health. (1987:5)

The format of the eleven standards "includes an overall statement; rationale for the standard; and structure, process, and outcome criteria" (7). The standards are listed below, with a paraphrased summary of the overall statement of the standard.

I ORGANIZATION OF NURSING SERVICES The organization of nursing services permits delivery of quality nursing care.
II ETHICS/PATIENT RIGHTS Ambulatory care nurses uphold ethical standards that recognize the dignity and worth of individuals.
III ENVIRONMENT Ambulatory nursing care maintains a safe, comfortable, therapeutic environment for patients.
IV COMPETENCY Nursing staff have appropriate qualifications and provide competent nursing care.
V STAFFING Sufficient staff are available to meet individual patient needs.
VI QUALITY ASSURANCE Ambulatory care agencies monitor and evaluate quality of care and resolve identified problems.
VII RESEARCH Nurses initiate, use, and participate in research studies.
VIII CONTINUITY OF CARE Nurses facilitate continuity of care.
IX ASSESSMENT Nurses systematically and continuously collect, analyze, and communicate, health status data.
X PLANNING/INTERVENTION The patient and nurse mutually formulate a plan of nursing care.
XI EVALUATION The nurse and patient continuously measure the patient's progress toward the desired outcomes and revise the plan of care and interventions as necessary (11-25).

The AAANA (1987:54-59) standards provide a sample position statement and orientation procedure for a registered nurse, but none for a licensed practical/vocational nurse. The sample gives required skills for the registered nurse that include demonstrated competence in admission and scheduling routines and documentation. Nursing care procedures include nursing history and assessment; documentation; referrals; patient teaching; phone triage; transportation of persons, records and specimens; medication administration; ordering supplies; autoclaving; and cleaning and stocking of rooms. Specific treatment skills include venopuncture, dressings, acetic acid soaks, application of unna boots and Jobst stockings, collection of specimens, suture removal, and tracheostomy care.

Miller (1990) describes the AAANA Standards and explains the need for such standards. She believes the standards are important because professional nurses are responsible not only for their own patient care, but also for the care delivered by non-professional staff. Also, complex technology increases the problems of risk management. In addition, the standard of care that is used to develop staffing patterns, "focuses on patient acuity and care needs, not simply numbers of patients seen" (1990:38).

Miller suggests that an initial client assessment should include vital signs, current prescribed and over-the-counter medications, allergies, impairments that will hinder self-care, reason for the visit, and previous patient teaching. She believes that ambulatory care nursing standards should include at least three components:

1. Education of the patient for self-care
2. Specific expectations for nursing care delivery while the patient is in the ambulatory environment
3. Documentation of all aspects of care and patient instructions, remembering that the patient, nurse, physician and other health professionals are in partnership in the care process (40).

Miller concludes by challenging ambulatory care administrators to promote use of ambulatory care standards of practice. "This would help to ensure that the quality of ambulatory care is uncompromised and the cost of that care is affordable" (1990:40).

The Joint Commission on Accreditation for Hospitals (JCAHO) (1990) publishes an accreditation manual for hospitals. The standards for hospital-sponsored ambulatory care services are defined in the HO (hospital) chapter. Although these standards do not directly address the role of the licensed practical/vocational nurse, they do establish the guidelines under which s/he will work. The seven standards are listed below, with a brief paraphrase of the criteria for the standard (57-67).

HO.1 Qualified practitioners manage the ambulatory care service and provide care. A written philosophy and policies guide the actions of the staff. The facility uses only approved ancillary services.

HO.1.13 The duties and responsibilities of other staff disciplines and their relationship to physicians and nurses are defined in writing and are provided in accordance with applicable standards.
HO.2 The hospital provides appropriate education including training for cardiopulmonary resuscitation, safety, and infection control.
HO.3 Written policies and procedures guide patient care.
HO.4 The hospital implements safe management of structures, systems, policies, and procedures.
HO.5 The hospital maintains medical records.
HO.6 The design of the hospital structures, systems, policies, and procedures improves the quality of patient care services.
HO.7 The hospital monitors and evaluates the quality and appropriateness of patient care.

In 1990 Geffers and a team of nurse managers and educators, that included Andrastek, Santana, Gillette, Simoneau, and Hutton wrote Past, Present, and Future: Ambulatory Nursing, published by FHP, Inc. Regional Ambulatory Nursing. The FHP, Inc. ambulatory care nursing philosophy is similar to that of the AAANA, and FHP, Inc. has adopted the same eleven standards of practice. In addition, they have sanctioned a local scope of practice. Eight areas make up this scope of practice: (1) Nurse/member interactions, (2) Evaluation [assessment], (3) Therapeutic intervention, (4) Patient counseling/education, (5) Maintenance of health, (6) Communication, (7) Documentation, and (8) Administrative functions. The primary psychomotor skill activities required of nurses in the in the FHP, Inc. regional system are found under the Evaluation [Assessment] and Therapeutic intervention areas.

FHP, INC. REGIONAL AMBULATORY NURSING SCOPE OF PRACTICE

Evaluation [Assessment]
Triage: assessment, classification, disposition
Physical assessment
Pediatric growth and development evaluation
Specimen testing: guiac, sugar and acetone
Skin testing
Audiometry
Spirometry
Tonometry
Visual acuity
Tympanogram

Therapeutic Intervention
Oxygen administration
IV therapy
Administration of blood and blood products
Medication administration
Chemotherapy
Anticoagulant therapy
Dysrhythmia recognition and treatment
Insertion of catheters/catheter care
Wound and skin care
Nebulizer treatments
Ostomy care
Venipuncture for specimen withdrawal
Diabetic management
Central line management
Suture removal.

Sanchez (1987) writes a book with job descriptions for various levels of nursing personnel. She explains the nature of the work, working conditions, employment, training, and job outlook. For LPNs she suggests that the nurses who work in doctors' offices and clinics will "prepare patients for examination and treatment, administer drugs, apply dressings, and teach patients prescribed health care regimens. They also may make appointments and record information about patients" (6).

Evaluation of the Ambulatory Care Experience

The literature provides a foundation for developing an evaluation process. In 1949 Tyler writes a small book that has become the standard for nursing education accreditation (Diekelmann, 1988). Tyler (1949) based his model on four considerations: (1) the educational purposes of the school, (2) the educational experiences that can be provided to meet these purposes, (3) the way the experiences are organized, and (4) whether the purposes are being met. In his book, Tyler suggests methods for assessing these questions. He states, "evaluation is essentially the process of determining to what extent the educational objectives are actually being realized by the program of curriculum and instruction" (105, 106). Tyler maintains that paper and pencil tests are useful evaluation tools, especially if they are used at the beginning and at the end of the learning experiences. Observation, interview, and products made by the students may also be valuable evaluation tools. Records made for other purposes may provide evidence of interest in the subject matter and skill in performing the behavioral objectives of the courses.

Tyler (1949) discusses the value of using sampling techniques to evaluate an individual student's skill levels. He points out that sampling is also useful in "appraising the effectiveness of curriculum experiences in use with a group of students" (109). He lists the criteria for evaluation instruments, namely, objectivity, reliability and most importantly validity. Tyler feels validity can be assured by getting samples of the behavior to be measured or by correlating an evaluation device with a directly valid measure. When the available data are analyzed they may suggest ways to modify the curriculum. Tyler concludes that "curriculum planning is a continuous process" (123). As materials and procedures are developed, faculty experiment with and evaluate them. When they find inadequacies and eliminate them, then they experiment again, evaluate again, and modify again in a continuous cycle.

Tyler (1949:124) points out that evaluation "has a powerful influence upon learning". He reports that the New York Regents' examinations

> have more effect upon what is taught in New York State than course of study outlines as such. Students are influenced in their study by the kind of evaluation to be made and even teachers are influenced in their emphasis by the sort of evaluation which they expect to be made (124).

Therefore, the evaluation instruments must correlate with the educational objectives or the evaluation may become the focus of both the students and the teachers.

Levine (1978) echoes Tyler's opinion about the impact of evaluation when he states,

> Evaluation has strong effects on student learning, and the choice of instruments and their method of use can have strong facilitative or aversive effects. Evaluation affects students . . . [because] it indicates to them the objectives considered most significant by their instructors . . . [and] it provides rewards and punishments in the form of feedback, grades, and recommendations that can have significant effects on students' self-esteem, career aspirations, and career accomplishments (40).

In 1978, Morgan and Irby address evaluation with an entire text dedicated to evaluating clinical competence in the health professions. They define clinical evaluation as "the process of collecting information on student clinical performance in order to make informed decisions regarding student progress and program performance" (xi).

McPherson and Dunatov contribute a chapter about implementation considerations of evaluation techniques in Morgan and Irby's text (1978:169). They comment that evaluation is a "complex activity." They suggest that the process can be divided into three steps. First, the evaluator must determine which questions to ask. Next, the evaluator must decide what data should be gathered to answer the questions. McPherson and Dunatov caution that it is not productive to collect more information than is essential to answer the questions that need answers. Finally, they assert that "analysis, synthesis, and interpretation of the data will yield the information required" (169).

To determine the questions to ask, McPherson and Dunatov propose two essential categories of questions: those concerning the students and those about the program. Several questions need to be asked that relate to students. Did each student accomplish the desired behavioral objectives? At what level of competence did the students accomplish the objectives? Did individual students exhibit specific strengths or weaknesses? What learning activities were successful and which ones failed to augment student learning? Were there problems that interfered with the learning process?

The answers to the student questions are the basis for the questions that must be answered about the program. However, since student characteristics can vary, teachers must design program evaluation to assess trends over time. Do the same problems reoccur witn subsequent groups of students? Are sequential groups of students having difficulty or failing to accomplish the learning objectives? What parts of the program consistently produce desired student goals?

Although student evaluation is essential, McPherson and Dunatov warn, "Learner achievement should not be depended on as the only source of feedback for curriculum change" (170). They suggest that the subjective opinions of both faculty and students need to be considered. Other factors that need to be considered when making decisions about curriculum change include, attendance patterns, specific problems in implementing the program, and unexpected outcomes from the program.

Gagné and Briggs (1974:286) write about evaluation as a chapter in their classic text, Principles of Instructional Design. These authors observe that the designer of instruction wants to find out, not only whether the instructional system "works," but also whether it works better than some other system. Faculty should obtain evidence to answer the following specific questions:

1. To what extent have the stated objectives of instruction been met?
2. In what ways, and to what degree, is it [the new program] better than the unit it will supplant?
3. What additional, possibly unanticipated, effects has it had, and to what extent are these better or worse than the supplanted unit?

Gagné and Briggs describe several other variables that must be considered when attempting to measure educational outcomes. These include the aptitude of the student himself or herself and the support s/he receives from the home and family, the school, or the community. Support may involve the availability of adequate classrooms, materials, and information from library or learning center resources. Process variables include such factors as the way instruction is carried out by school administration or instructors, sequence of learning experiences, and time available for learning.

To evaluate an instructional entity fairly, investigators must control for the aptitudes of the students, the support the students receive, and instructional process variables. They can measure aptitudes by using a standard test of intelligence. If a new program is being compared with a previous program, it is important that the aptitude of the students in the previous program is equivalent to the aptitude of the students in the new program. Similar caveats apply to both support for the student and instructional process variables. If conditions cannot be directly controlled so that support and process are similar, then the evaluators must use randomization or statistical control to attempt to equalize the situation. Randomization is ideal for purposes of control, but is usually very difficult to arrange. Therefore, "the identification and measurement of aptitude, support, and process variables must usually be undertaken" (303).

Berner and Bender (1978) advocate that the instructor base the evaluation on the specific clinical objectives and determine the instructional sequence used to obtain each objective. They suggest that, ideally, each step in the sequence should be evaluated. On the other hand, Lenburg (1979) takes the view that only the specific steps that are essential should be identified and evaluated. She states,

> Essential nursing behaviors or "critical elements," are the most finite units by which clinical performance is measured . . . They are the single, discrete, observable, and mandatory behaviors that collectively comprise the standard against which an individual's competence is measured. . . . When one of them is violated or omitted, patients are actually or potentially endangered and care being rendered is less than satisfactory (47-48).

Berner and Bender (1978) continue to outline their plan for evaluation by suggesting that once the instructor decides which steps shall be evaluated, s/he determines the evaluation strategies and documentation procedures. They caution that the evaluation strategy must be congruent with the objectives and the placement of the objectives within the curriculum sequence. In summary, the elements included in an evaluation design are the purpose for the evaluation, the planned objectives for the learning sequence, the learning sequence itself (the independent variable), the results of the learning sequence (dependent variables), and the placement of the learning sequence in the curriculum.

Levine (1978) suggests several instruments that may be applicable for evaluation of the ambulatory care clinical experience. He notes that evaluation methods that are inexpensive, free of error, tell precisely what is needed to be known, and that encourage students to learn are desirable. Unfortunately, these qualifications are difficult to obtain. Sometimes unreliable tests can facilitate learning but "maximizing reliability can gravely weaken the validity of an evaluation instrument" (41). For example, tests in real situations are valid, but because the teacher can seldom replicate the situations, the tests are not reliable. Analytical tests such as multiple choice tests are reliable, but may not be valid representations of the real situation that needs to be evaluated. True-false tests usually have high reliability if enough items are used but often have low validity because cognitive decisions require more complex judgments than can be measured by a true-false test.

Simple multiple choice questions can be highly reliable and have low to moderate validity. The teacher can easily replicate these tests, but they may not accurately reflect real situations because of their simplicity. Levine maintains that "in any measurement situation the first choice should be simple multiple-choice questions" (44).

Complex multiple-choice questions are another method that has high reliability and moderate validity. Test writers base these questions on complex real-life situations that require several possible courses of action. They may also use media other than print to provide a more accurate picture of the client. The questions are difficult to write and may be ambiguous, but if the writers keep good questions in a test bank, they can ameliorate the problem of needing to write new questions for each examination. Levine recommends that students be given some examples of a similar question as practice exercises and highly recommends this type of question.

Levine describes rating scales of individual activities as highly valid but the reliability can vary greatly. In health care, clinical teachers use this type of test with real clients, so the situation for each student may have considerable variation. Although the student may be able to perform the skill in a testing situation, teachers may question his or her motivation or ability to perform the skill in all situations. The practitioner who observes the student may not be an excellent observer of student activity and may sometimes be reluctant to fill out a complex rating form. Levine comments that this type of evaluation tool seems "to be particularly valuable in the development of psychomotor skills" (49).

Hart and Waltz (1988:99) describe educational outcomes for nursing programs. They list the top ten student outcomes evaluated versus those considered to be most important to be measured. These outcomes will be considered to measure student achievement in the ambulatory care experience.

	Outcomes Evaluated		**Rank Related to Importance**
1.	Academic achievement	1.	Academic achievement
2.	Implementation of care plan	2.	Nursing diagnosis
3.	Nursing care plans	3.	Nursing care plans
4.	Evaluation of care plan	4.	Implementation of care plan
5.	Assessment—physical	5.	Problem solving/critical thinking decision making
6.	Nursing diagnosis	6.	Evaluation of care plan
7.	Psychomotor skills	7.	Assessment—physical
8.	Assessment—psychosocial	8.	Assessment—psychosocial
9.	Grade point average	9.	Psychomotor skills
10.	Safety	10.	Clinical performance/ clinical competence

Sundeen, et al. (1989) propose five evaluation criteria that an individual nurse can use to evaluate his or her own communication. The vocational nursing faculty may wish to consider these criteria as program evaluation criteria:

1. Effectiveness—Were preplanned behavioral goals used to measure the outcomes?
2. Appropriateness—Were the learning experiences relevant in meeting the desired outcomes?
3. Adequacy—Was a sufficient amount of time spent to accomplish each of the goals?
4. Efficiency—Were the learning experiences directly and effectively focused on the learning goals?
5. Flexibility—Can the learning experiences be adjusted to meet specific needs of the learner?

Erwin (1991) writes an entire book about assessing student learning and development. This source is valuable because of its currency and because Erwin corroborates the continuing value of earlier authorities, such as Tyler, Bloom, Mager, and Stufflebeam. Erwin primarily approaches assessment from an institutional point of view but he does give some valuable insights that may have application to the evaluation of the ambulatory care clinical experience. Current usage seems to favor the term, outcome assessment, rather than evaluation as was described in the work of earlier authors. Erwin defines assessment "as the systematic basis for making inferences about the learning and development of students" (15). Erwin also states that "the terms assessment and evaluation are sometimes used interchangeably" (16) but evaluation is often used in a broader context.

Erwin suggests that the two major areas to be assessed are learning objectives that include subject matter knowledge and skills, and developmental objectives such as critical thinking, ethics, identity, and physical well-being. Erwin clarifies the differences between goals, objectives and outcomes. Goals are broad, global, and sometimes vague statements of institutional purposes or mission. Objectives are a list of statements that indicate what the program is "trying to accomplish with the student" (35). "Outcomes are the achieved results or the actual consequences of what the students demonstrate or accomplish" (35).

Erwin describes several different types of tests that can be used to determine outcomes. He distinguishes between norm referenced and criterion referenced tests, and identifies the two broad ways of classifying assessment tests: "*selected-response* and *constructed-response* formats" (55). Selected response tests require the student to select from given choices such as, multiple-choice, true-false, and matching tests. Constructed response tests require the student to supply an answer such as, completion and essay tests, performances, or products. Experts consider these kinds of tests as qualitative measures. He also describes rating scales and checklists and gives suggestions for their design and use. Erwin admits that there is no error-free method for establishing the cutoff scores for tests. Users often establish cutoff scores by trial and error with adjustments based on students' test results. Several authors describe other methods, wherein content experts make judgments about the importance of test items. Angoff's procedure requires the judges to determine the probability that a minimally competent student can correctly answer the test item. Martenza's procedure requires the judges to decide the importance of each test item for the minimally competent student. Ebel directs that the judges determine both importance and difficulty of test items. This method is troublesome because judges confuse importance and difficulty. Erwin remarks that cutoff scores often have arbitrary aspects and suggests discussions about the relative values of norm-referenced and criterion-referenced tests and appropriate cutoff scores for each will continue.

Kingsbury (1992) reports in a publication of the National League for Nursing (NLN), that the Angoff procedure is used to determine NLN examination cutoff scores for nursing "challenge" examinations. The faculty of a school using the NLN examination becomes the panel of judges that decides the minimum score that would exempt the student from taking the course.

Erwin (1991) maintains that when assessment is done to improve the educational offerings, there are no "negative" findings. There will be positive findings and areas that can be improved when the assessment has shown where improvements should be made. It is essential that the report list steps for action. An assessment that does not provide clear direction to the decision maker, will fall short of its goals. "Data should support decisions to be made, not decisions that have already been made" (145). Erwin concludes his book by challenging educators to make the most of the opportunities to improve education through assessment.

In 1991, Borecky, develops a health occupations evaluation project under a grant from the Chancellor's Office, California Community Colleges. The package consists of nine survey instruments and a Scantron program on computer diskettes that aids in the tabulation of data. Three of these instruments may have applicability in evaluating the ambulatory care clinical experience. The instruments all use a five-level Likert rating scale. The first is "Student Evaluation of a Clinical Setting," a six-item survey. The second is "Instructor Evaluation of a Clinical Setting," a nine-item survey. The third is "Agency Evaluation of Student Experience," a survey with twenty-one items, that also asks for agency identification information and additional comments. These instruments ask very general questions but they may be able to be modified so that more specific questions can be substituted into this standard format. The use of optical scanning to input data makes this system very attractive.

An extensive review of the literature was conducted in six areas: (1) current trends in health care delivery, (2) Orem's SCDTN, (3) the use of the second step of the nursing process—nursing diagnosis, along with the critical thinking necessary to arrive at a nursing diagnosis, (4) wellness and the prevention of illness, (5) nursing practice in ambulatory care, and (6) evaluation of the ambulatory care experience. The literature reviewed provided excellent background information, and many specific ideas that are incorporated into the ambulatory care experience.

Chapter 3

METHODOLOGY AND PROCEDURES

Introduction

The focus of the Major Applied Research Project was a revision of the Long Beach City College ambulatory nursing clinical experience. The research was planned to accomplish three purposes. The purposes of this study were to confirm the need for an ambulatory nursing experience, to reconstruct the present LBCC ambulatory care experience, and to develop a plan for evaluating the revised experience. Four research questions guided the study:

1. What circumstances suggest a need for an ambulatory nursing care clinical experience?
2. Is the Long Beach City College vocational nursing program structured so that it will support the ambulatory care clinical experience?
3. How shall Orem's self-care deficit nursing theory, nursing diagnosis and critical thinking, and wellness and prevention of illness be integrated into the ambulatory care experience?
4. How shall the ambulatory care clinical experience be evaluated?

This exploratory study also investigated the current status of ambulatory nursing care to determine what should be taught to students. Stevens contrasts exploratory studies with experimental research.

> Exploratory research is the systematic inquiry that seeks to identify the salient categories or characteristics of a given phenomenon. Until significant categories or characteristics of a phenomenon have been identified, it is not possible to perform classic experimental research . . . (1984:204).

This exploratory research was designed to develop an adequate base of current information to describe the characteristics of a clinical experience in ambulatory care and to provide a model for other nursing programs which might wish to use ambulatory care facilities as learning sites for student nurses.

Methodology

The development of a product was used in this study to solve the problem of revising the ambulatory care nursing clinical experience. The clinical experience was improved by synthesizing input from the review of the literature related to (1) recent changes in the delivery of health care, (2) an analysis of the program structure that would support such a clinical experience, (3) precepts elucidated in Orem's (1991) Self-Care Deficit Theory of Nursing (SCDTN), (4) the use of nursing diagnoses and critical thinking in ambulatory care settings, (5) the parameters of wellness and illness that are amenable to nursing care in ambulatory care settings, (6) nursing care activities in ambulatory care settings, and (7) guidelines to be used in evaluating the clinical experience.

Data to validate the learning content of the ambulatory clinical experience were gathered from several sources. Surveys were conducted with students who had experienced the revised ambulatory care experience, directors of vocational nursing programs in California, staff nurses working in ambulatory care facilities, and the Long Beach City College vocational nursing faculty. Personal interviews were conducted with nursing administrators of ambulatory care facilities, the executive officer of the Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE), and a nursing consultant from the BVNPTE.

Procedures

Recent Changes in the Delivery of Health Care that Support the Ambulatory Care Experience

Data to confirm the need for an ambulatory care clinical experience for student nurses were gathered from the literature, from the directors of the ambulatory care agencies

used by the LBCC vocational nursing students, the executive officer of the Board of<<<MARK>>>
Vocational Nurse and Psychiatric Technician Examiners (BVNPTE), and from a survey of the LBCC Vocational Nursing Advisory committee to determine their continuing need for graduates of the LBCC vocational nursing program.

Literature review. The review of the literature examined the delivery of health care from the early 1970s to the present. The topics for the review included the following: (1) the development of health maintenance organizations (HMOs), (2) the initiation of prospective payment plans, (3) the growth patterns of HMOs and hospitals, (4) the development of nursing centers managed and staffed exclusively with nursing personnel, (5) the history and recent trends in the delivery of primary care by nurses, (6) changes in ambulatory care companies as the industry matures, (7) the health care needs of an aging American population, and (8) the continuing cycle of nursing shortage and excess. The literature that was examined was selected from the areas of public health, medical business, nursing, hospital statistics, general business, managed care, and ambulatory care.

Ambulatory care directors. Formal interviews with three directors of ambulatory care facilities in Long Beach, were conducted, during the spring of 1992. The following questions were asked: "In the next five years will ambulatory care growth change?" and "In the next ten years will ambulatory care growth change?" The respondents were given the option of answering, "Decrease," "Stay about the same," or "Increase." They were also asked the reason(s) for their choice and the area(s) for change.

Executive officer of the BVNPTE. On February 25, 1992, the executive officer of the BVNPTE was interviewed. She was asked to predict the future of LVNs in ambulatory care during the next five and the next ten years. She was asked the following questions: "In the next five years, will the number of LVN jobs in ambulatory care change?" and "In the next ten years will the number of LVN jobs in ambulatory care change?" She was given the option of choosing, "Decrease," "Stay about the same," or "Increase," and was also asked the reason(s) for her choice.

LBCC vocational nursing advisory committee. In May 1992, the LBCC Vocational Nursing Advisory Committee was sent a survey to gather information about several matters. One of the questions addressed the need for vocational nurses in the community. "Is there a need for LVNs in your agency or area of concern?" "Does your agency support admitting the maximum number (45) of students to the vocational nursing program each semester? "Yes" or "no" responses were requested.

Strategies Related to the Revision of the VN Program Structure

During regular and called faculty meetings, the five full-time Long Beach City College vocational nursing faculty reviewed the curriculum structure to determine whether it supported the ambulatory care clinical experience. They analyzed three vocational nursing program documents: the "Long Beach City College Philosophy," "Curriculum Objectives," and the "LBCC Taxonomy of Nursing Diagnoses, Based on Orem's Theory of Nursing."

Philosophy and curriculum objectives. As a part of the general review of the curriculum structure related to the ambulatory care experience, the faculty compared the Philosophy and Curriculum Objectives point by point, with the behavioral objectives and learning tools for the ambulatory care experience. The faculty had updated the philosophy to incorporate Orem's Self-Care Deficit Theory of Nursing (SCDTN) when the nursing theory was adopted in 1989. However, the review of the philosophy related to the ambulatory care experience and nursing diagnosis revealed that neither nursing diagnosis nor the ambulatory care experience were adequately supported in the philosophy. To resolve this problem, the faculty constructed a new section of the philosophy. The faculty also compared the Curriculum Objectives with the behavioral objectives and learning tools for the ambulatory care experience.

LBCC taxonomy of nursing diagnoses. The faculty created the vocational nursing diagnosis taxonomy in 1990 and included fifty-six basic nursing diagnoses that had been carefully selected from more than one hundred NANDA diagnoses. The faculty had determined that these diagnoses were appropriate for naming the nursing problems commonly encountered by vocational nurses in the care of hospitalized and ambulatory clients. California's Vocational Nursing Practice Act requires that vocational nurses practice "under the direction of a licensed physician, or a registered professional nurse" (BVNPTE, 1987:§2859). The faculty had decided that it was possible to teach vocational nursing students how to make these fifty-six diagnoses, since the students would always be working with the direction of a registered nurse.

During the review of curriculum documents to support the ambulatory care experience, the faculty realized that the vocational nursing diagnosis taxonomy was biased toward the medical model and did not reflect Orem's SCDTN. The faculty defined the problem during a faculty meeting early in the spring semester of 1991. The faculty reviewed the literature to determine how to revise the taxonomy. An article by Jenny (1989), "Classifying Nursing Diagnoses: a Self-Care Approach," was very helpful in that it suggested using several of Orem's concepts as major headings for the taxonomy. Unfortunately Jenny's system was complicated and added even more diagnoses than those approved by the North American Nursing Diagnosis Association (NANDA), so it could only provide suggestive guidance.

The faculty accomplished the revision of the taxonomy by using a modified Delphi technique (Abbott et al., 1988). Three rounds of information gathering were used. For the first round, a tentative taxonomy document based on Jenny's suggestions was distributed. The faculty members made comments and suggestions and the results were tabulated. A month later at a regular faculty meeting, the faculty used the results of the survey to create new ideas for the taxonomy. After the faculty meeting, the new ideas were put into written form and distributed. Again the faculty members added revisions and suggestions. They also shared the results of the first round with the students and had them try using the taxonomy. After two months the results of this work were tabulated and presented at a third faculty meeting. This time the meeting took place during the final examination period, when more time was available to work out problems. For the last round of the Delphi procedure, the faculty created the final instrument during the faculty meeting. A final decision was delayed for two days to give adequate time for consideration. The faculty then met to share evaluations and make final decisions. At this meeting the faculty members were able to agree on a final format. Even though the process was long and arduous, the faculty agreed that the new taxonomy would be tentative, until it could be put to a use-test by students. However, the faculty also agreed that they would use the taxonomy for a year before considering any further changes.

The faculty and students used and evaluated the revised taxonomy for a year. During the fall of 1992, the faculty met at a regular faculty meeting and again revised the taxonomy. This time the changes were primarily the result of experience and they were accomplished easily, by consensus, during three subsequent faculty meetings. As a final step the vocational nursing faculty determined that there was appropriate correlation between the Taxonomy of Nursing Diagnoses and the six ambulatory care nursing learning tools. The current LBCC curriculum structure documents: philosophy, curriculum objectives, and taxonomy of nursing diagnoses, are found in Appendix H, on page 276.

Procedures Used to Revise Learning Materials for the Ambulatory Care Experience

The original course. In the spring of 1988, when the ambulatory care experience was first proposed, the program director of the LBCC VN Program petitioned the BVNPTE for a waiver of the requirement that the experience in community health agencies could only be fifty-four hours in length. The petition requested that the BVNPTE permit LBCC to offer a 108-hour ambulatory care experience. Based on the first draft of the clinical behavioral objectives, the nursing consultant, Anderson, denied this request. Anderson explained that the submitted behavioral objectives were too general and did not give the students enough guidance to allow them to function in the clinical area without the supervision of an on-site instructor. Since the students would be receiving only once-a-week supervision by a teacher, the objectives must be much more detailed and specific, and must guide the students in doing the precise behaviors required during the experience. A new group of behavioral objectives, an evaluation tool, and a set of six assessment and nursing care plan instruments were then created to guide the students' experience. Two directors of ambulatory care facilities and the nursing supervisor of another agency reviewed and approved these instruments. When the instruments were re-submitted to the BVNPTE, the consultant approved of the plan and granted a waiver for a 108-hour clinical experience on March 2, 1988. After three semesters, new teachers were assigned to the course and they continued to use the original course materials until 1991.

The learning experience package. The theory behavioral objectives, clinical behavioral objectives, clinical evaluation, and student learning tools, found in Appendix I on page 281, delineate the learning experiences used in the ambulatory care experience. As part of the revision process for the learning experience package, an extensive review of the literature was conducted in five areas: (1) Orem's SCDTN, (2) the use of the second step of the nursing process—nursing diagnosis, along with the critical thinking necessary to arrive at a nursing diagnosis, (3) wellness and the prevention of illness, (4) nursing practice in ambulatory care, and (5) evaluation of the ambulatory care experience. The areas investigated under each of these topics are delineated below. Although all the literature reviewed provided excellent background information, only the specific ideas from this review, that directly influenced the revision of the ambulatory care learning package, are summarized in Chapter 4, the results of the investigation.

The review of the literature related to Orem's SCDTN.

1. Nursing theory development
2. Nursing theory in the LBCC VN program
3. Development and content of Orem's SCDTN
4. Use of conceptual models
5. Criticism of Orem's SCDTN
6. Application of Orem's SCDTN
7. Differentiation between nursing and medical treatment
8. Using Orem's SCDTN in the clinical setting

The review of the literature related to nursing diagnosis and critical thinking.

1. Vocational nursing's place in the field of nursing and the entry-into-practice controversy
2. History of the nursing process, the place of nursing diagnosis, and its meaning to nursing
3. The vocational nursing scope of practice, the taxonomy of educational objectives, and nursing diagnosis
4. Critical thinking
5. Nursing diagnosis in the LBCC VN program

The review of the literature related to wellness and the prevention of illness.

1. Definition of health
2. National, state, and local perspectives on wellness and prevention of disease
3. Nursing's agenda for health care reform
4. Other nursing perspectives on health care for wellness

In addition to the three areas related to the theoretical content of the learning tools, the literature was also reviewed relative to the clinical content for the learning tools and methods of evaluating the ambulatory care clinical experience.

The review of the literature related to nursing practice in ambulatory care. In this area, two major subjects were researched. They are trends in ambulatory nursing care and skills used in ambulatory care nursing.

The review of the literature related to evaluation of the ambulatory care experience. The work of authors who wrote about program and course evaluation from 1949 to 1991 was examined. Some of the authors discussed basic theory of evaluation, while others wrote only about evaluation in nursing. The nursing references included evaluation methods from both nursing theory and clinical nursing performance.

A new text. The faculty adopted a new text, Health Assessment of the Older Adult by Eliopoulos (1990), for the fall of 1991. This text emphasizes health assessment of the older adult. In the summer of 1991, the writer and Callahan, the teacher of the course, collaborated in writing new theory behavioral objectives that included the content of the course and followed the order of the new text.

The clinical behavioral objectives. The clinical behavioral objectives are a set of directions for using each of the six assessment and nursing care tools that are the basis for the ambulatory care learning experiences. In 1989, several slight revisions were made in the clinical behavioral objectives to provide added clarification. In 1990, the time limitations for the six learning tools were added. However, the clinical behavioral objectives remain essentially the same as when they were originally conceived and approved by the BVNPTE. For five years, the students have been able to follow these directions and correctly determine what they are to do during the clinical experience. The students' appropriate responses to the clinical objectives are evidence that the objectives provide clear direction for the students' behavior.

The six learning tools. The learning tools were created to help students give quality nursing care during short interactions when the focus is wellness. In ambulatory care, the contact with clients may be as little as five minutes, as contrasted with a hospital contact that occurs over an eight-hour day. In ambulatory care, the focus can be wellness and prevention of illness, whereas the hospital focus is usually curing of illness. Students, who are new to ambulatory care, need guidance as they learn to quickly assess clients' potential for preventing illness and developing healthier life styles, determine a nursing diagnosis, and develop, implement, and evaluate, a nursing care plan. The literature review related to the learning tools was done to either support or repudiate wellness as a major focus, and to determine how to incorporate Orem's SCDTN.

The six assessment and nursing care learning tools were originally based on the medical model. The students were directed to assess the client using a head to toe, body systems approach. After the vocational nursing department adopted Orem's Self-Care Deficit Theory of Nursing (SCDTN) in the fall of 1989, the faculty found that the instruments were asynchronous with the new departmental nursing care theory. In the spring of 1991, a review of the literature revealed no specific guidelines for adapting materials from one theoretical framework to another. However, Alfaro (1990:22) gives an example of a nursing history organized according to Orem's theory. In this example Holy Family College Department of Nursing in Philadelphia arranged a nursing history under Orem's eight universal self-care requisites. Further guidance was found in Better Documentation (1992), one of the books in the Clinical Skillbuilders series. In this reference, an assessment form organized by the medical (biological systems) model is compared with two nursing assessment forms. One of these forms is organized with NANDA's human response patterns. The other is arranged under Gordon's (1982) functional health patterns. Some of the data that the nurse needs to collect are similar for both the medical model and the two nursing models. However, the form based on the medical model, emphasizes physiological function, assessed in a head-to-toe order. In the two nursing forms, a more holistic approach is taken and the client's responses to his/her situation are also addressed. None of the published nursing assessment tools used a head-to-toe, body systems order for the assessment. These nursing models served as sources for the revision of the ambulatory care learning tools.

For the revised version of the Quick Head to Toe and the Nursing Physical Assessment, the following sequence of Orem's universal self-care requisites was devised by this writer: Normalcy: 1a Physical integrity, 1b Psychological integrity, 1c Development, 2. Social Interaction/Solitude, 3. Activity/Rest, 4 Safety, 5. Air, 6. Water, 7. Food, 8. Elimination (see Appendix I, pages 287 and 289). This sequence worked well for the Quick Head to Toe, but on pilot testing for the Nursing Physical Assessment the order of assessments proved to be impractical. The nurse needs to do certain measurements and tests, such as weight and vision testing, outside the examining room. S/he should do other tests, such as a mental status test, before the client undresses and must listen to the chest to assess breath sounds while the client is wearing a gown. The beginning learner finds the process much easier if the form directs the sequence of observations. Therefore, the topics for assessment were retained as Orem's Self-Care Theory suggests, but the order was arranged for practical considerations.

For the "Self-Care History and Action Plan," the assessment topics are again indicated by Orem's Self-Care Theory, but the order was suggested by Eliopoulos (1987): 1. Ventilation and Circulation; 2. Nutrition; 3. Excretion and Hygiene; 4. Activity, Rest, and General Comfort; 5. Solitude and Social Interaction; 6. Safety; and 7. Normalcy of Self-Concept. An eighth category, Spiritual Satisfaction was added by this writer (see Appendix I page 288.

In the original learning tools History Form and Physical Form were included. These forms were adaptations of a doctor's History and Physical. An analysis of the Self-Care History and Action Plan showed that it included most of the information on the original History Form. Therefore, the History Form was eliminated. The title for the Self-Care History and Action Plan was shortened. The title for the Quick Head to Toe and the Physical Form was changed avoid the reference to the medical model.

The original text for Developmental Levels: Older Adult was Gerontological Nursing by Eliopoulos (1987:69-70). Eliopoulos uses Orem's SCDTN as the theoretical framework for her book. She states:

> Sound nursing practice is based on a theoretical framework: an organized statement of principles that guide actions. Theoretical frameworks can make nursing care easier and more effective by offering systematic approaches that can be used for every patient. Of the various theories available to nurses, Orem's self-care theory is particularly relevant to geriatric care . . . Using the basic principles of Orem's theory, a self-care model for gerontological nursing practice can be developed.

The last three learning tools: Drug Profile, Nutrition Profile and Teaching Plan, and Range of Motion and Muscle Strength Assessment and Plan, were originally devised using Eliopoulos's concept of Orem's SCDTN (1987) (see Appendix I, pages 290, 291, and 292). The tools were designed to help the student gather information about the drugs the client is taking, the diet s/he eats, and the exercise s/he should be doing. After the student corrects any of the client's misconceptions and teaches any required new information, the client should be able to manage these areas by himself or herself. This is the essence of self-care, so the content of the forms did not need to be changed. The format and spacing of these learning tools was slightly rearranged and the titles were changed to make them more reflective of Orem's Theory.

During the revision process, the vocational nursing faculty compared each of the learning tools with the following LBCC VN program documents: "The Philosophy," "Curriculum Objectives," "Orem's Self-Care Deficit Theory of Nursing," and the "LBCC Taxonomy of Nursing Diagnoses" (see Appendix H, page 276). The faculty evaluated the learning tools to make sure they were reflective of the philosophy, curriculum objectives, and theory base for the program. After the revisions were completed, the vocational nursing faculty evaluated the six learning tools used in the ambulatory care experience and judged whether they adequately related to Orem's SCDTN.

Interview Procedures

Personal telephone interviews were conducted with Haynes, Executive Officer of the California Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE) (see Appendix A on page 224) and Anderson, nursing consultant for the BVNPTE (see Appendix B on page 235). The questions were sent to the BVNPTE officials two weeks before the interview so they could prepare their answers. The purpose of the interview with the executive officer of the BVNPTE was to gather information about (1) the present and future place of the vocational nurse in ambulatory care, and (2) future trends in vocational nursing curricula. The purpose of the interview with the nursing consultant of the BVNPTE was to gather information about (1) the structure of an ambulatory care clinical experience, and (2) skills to be learned in ambulatory care facilities. Haynes was interviewed on February 25, 1992, and Anderson was interviewed on April 3, 1992. Some of the answers from the

BVNPTE executive officer were compared with the responses to the same questions that were asked of the three ambulatory care administrators. Other questions were unique to the executive officer. All the responses are summarized and presented in narrative form. Some data from the BVNPTE nursing consultant were compared with the data from the faculty survey (same form). These data are also compared with the responses of ambulatory care staff nurses and the directors of California vocational nursing programs (similar form). These comparisons are presented in Table 8, on page 160. Additional comments from the BVNPTE nursing consultant interview are presented in narrative form.

Personal interviews were conducted to get information and recommendations from the three administrators of the ambulatory care agencies in Long Beach used by the LBCC vocational nursing program (see Appendix C on page 244). The purpose of these interviews was to gather information about: (1) present and future trends in ambulatory care, (2) the structure of the ambulatory care experience, (3) and theory content of the ambulatory care experience. The interview with Andrastek, Associate Director of Nursing for FHP, Inc., was conducted on April 10, 1992. The interview with Malloy, Director of Nurses for Long Beach Comprehensive Health Care was conducted on April 14, 1992. The interview with Robbins, Director of Nurses for Harriman Jones was conducted on April 17, 1992. Information from the interviews with agency administrators was compared, summarized and presented in narrative form. Each of the five interviews was about one hour long.

Survey Procedures

Four surveys were conducted. The student survey was pilot tested during a regular class period, with the December 1991 third-semester vocational nursing class. The students had all completed the ambulatory care nursing experience. The survey was finished, without difficulty, in approximately ten minutes. After attempting to document the results, one question was changed from a negative statement to a positive statement so that all six questions would have a similar format. In May 1992, the third semester vocational nursing students were surveyed after they had completed the ambulatory care experience (see Appendix D on page 251). The purpose of the questionnaire was to evaluate the effectiveness of the Long Beach City College ambulatory care learning projects in guiding student learning in the clinical area.

The staff nurses' survey was pilot tested with three vocational nurses, in January 1992. The survey was completed in approximately fifteen minutes. After the pilot testing, the form of the survey was modified. Seven questions were asked about the staff nurses' school experiences in ambulatory care. The original questions asked both how and where learning experiences were obtained within the same question. The pilot study group judged that this was confusing so the questions were changed so each one had a separate "A" part and "B" part. The first part asked "How did you learn to perform ______?" The second part asked "Where did you learn to perform ________?" The pilot test group judged that the change made the questions much clearer. No other substantive changes were made in the instrument. The staff nurses' survey is in Appendix E on page 257.

The regional director of FHP, Inc. was contacted regarding the feasibility of using FHP, Inc. ambulatory care staff nurses to complete the nurses' survey. The regional director invited the researcher to the February meeting of the directors of Long Beach and Orange County FHP, Inc. ambulatory care facilities. The purpose of the survey was explained to the group. The directors of the five facilities that provide learning experiences for Long Beach City College students then agreed to conduct the survey. Sufficient survey instruments for all the staff nurses at each agency were distributed to the directors. The directors agreed to return the completed survey instruments to the FHP, Inc. corporate office within a month, so the forms could be picked up by the researcher. Approximately two hundred survey instruments were given to the directors. Exactly how many they distributed to the staff nurses is not known, but 113 completed survey instruments were returned to the researcher. The purpose of this questionnaire was to gather information about (1) staff nurses' actual educational preparation for ambulatory nursing and (2) staff nurses' ideas about the kinds of educational experiences that would have been useful as preparation for ambulatory care nursing.

A survey of the eighteen members of the Long Beach City College vocational nursing faculty was conducted in May of 1992 (see Appendix F on page 264). Three full-time members of the faculty pilot tested the instrument. They were able to complete the survey in fifteen to twenty minutes. They did not suggest any changes in the instrument. The researcher gave the survey instrument to the other two full-time faculty members. Questionnaires were mailed to the thirteen part-time faculty members. The faculty members were asked to respond to the same questions that were asked in the interview with the nursing consultant. The purposes for gathering the information were the same as the purposes for the consultant's interview.

In January 1992, a survey instrument was pilot tested with ten program directors at an officers' meeting of California Vocational Nursing Educators. Several changes were made in response to suggestions made by these directors. The questions about the schools and the students were clarified and rearranged. The seven survey questions were also modified by separating each question into an "A" part and a "B" part. This divided the question into a part that asked where students learn, and a second part that asked where students practice. Also, the term, "practice" was substituted for the term, "teach," in the responses. The responses then read, "Our students do not practice this skill . . . ." instead of "We do not teach this skill . . . ."

In February of 1992, the modified surveys (see Appendix G on page 270) were mailed to eighty-three vocational nursing schools. The responses indicated that there are approximately seventy-five active vocational nursing schools in California. The exact number of active schools is not available from the BVNPTE because some schools are listed by the board as accredited schools, even though the institutions have closed. A reminder letter, personally addressed to the director, was sent three weeks after the original letter, to all those directors who had not responded. In March 1992, at a state conference of vocational nursing educators, a few directors were given another copy of the survey instrument, and completed and returned the survey at the conference. The purpose of this survey was to determine where skills that are preparation for ambulatory nursing care are taught in California vocational nursing schools.

Data from the surveys were collected and categorized. Typical descriptive statistics of frequencies and percents were computed for all four surveys, using an Excel spreadsheet. Because of the exploratory nature of the questionnaires there was no need for statistical evidence to confirm or deny any hypothesis, so no statistical comparisons were made between or among groups.

From the data collected, trends and suggestions emerged about the future of vocational nursing in ambulatory care, appropriate content for an ambulatory care experience, and how the Long Beach City College ambulatory care experience should be modified. These data are reported in Chapter 4.

The Collection of Data Related to Evaluation of the Ambulatory Care Experience

The immediate assessment. The evaluation of the ambulatory care clinical experience has two parts: an immediate assessment and an on-going assessment. The LBCC vocational nursing faculty did the immediate assessment to evaluate the revised behavioral objectives and six assessment instruments. The faculty measured these elements against Tyler's (1949) four fundamental curriculum development questions. Tyler's questions are as follows: (1) What educational purposes should the vocational nursing program seek to attain? (2) What educational experiences can be provided that are likely to attain these purposes? (3) How can these educational experiences be effectively organized? (4) How can the faculty determine whether these purposes are being attained?

The ongoing assessment. Ongoing assessment is planned but will not be done as a part of this study. A multiple choice test, worth sixty percent of the final examination grade (150 of 250 points) will assess the students' knowledge of appropriate nursing responses to client situations. The classroom teacher will give this part of the final examination.

The students' ability to apply theory to practice will be judged with a paper-pencil test of assessment skills, critical thinking, and planning skills. This section of the examination will be worth twenty-four percent of the final examination grade (sixty of 250 points). The classroom instructor will give to the students, three written scenarios about ambulatory care clients. The written information will contain sufficient data to enable the students to assess the self-care needs of the ambulatory care clients described in the scenarios. The students will use two "Quick Adult Assessment" and one "Self-Care History" to write the assessments and determine which assessments are significant. They will then determine what to do with or for the client, and will write a plan explaining their intended actions.

The final sixteen percent of the examination (forty of 250 points) will evaluate nursing skills. This part of the final examination score will be based on the ambulatory care instructor's evaluation of the students' ability to perform selected clinical skills. During the ambulatory care experience the students must arrange to have their co-assigned staff nurse(s) validate their ability to perform twenty-seven skills. These skills, with a point value for each, are listed on the clinical evaluation form (Appendix I on page 286). In the ambulatory care syllabus, there is an evaluation sheet for each skill that outlines the critical elements for the skill. If the staff nurse determines that the student is able to perform each critical element, s/he gives the student full credit for that skill and she signs the skill sheet. The clinical teacher will validate the completion of the skill sheets with the staff nurses and record the points earned on the Clinical Evaluation Form. The students can earn forty points for satisfactorily performing all twenty-seven skills. The classroom instructor will then incorporate these points into the final examination score.

Chapter 4

PRESENTATION OF RESULTS

Introduction

The results of this study were accumulated from several sources. An extensive review of the literature was done. Interviews were conducted with experts in the field of ambulatory care and with officials from the California Board of Vocational Nurse and Psychiatric Technician Examiners. Surveys were done to collect information from students who have completed the ambulatory care experience, staff nurses working in ambulatory care, directors of California schools of vocational nursing, and the LBCC vocational nursing advisory committee. Information from all these sources has presented a remarkably homogeneous picture of ambulatory care and the knowledge and skills needed by nurses in this nursing specialty. This information has been used to revise the ambulatory care experience for vocational nursing students at Long Beach City College.

Results

Recent Changes in the Delivery of Health Care that Support the Ambulatory Care Experience

Information about the need for an ambulatory care clinical experience for student nurses was obtained from the literature, from the directors of the ambulatory care agencies used by the LBCC vocational nursing students, the executive officer of the Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE), and from a survey of the LBCC Vocational Nursing Advisory committee to determine the continuing need for graduates of the LBCC vocational nursing program.

Literature review. The writers whose work was examined in the review of the literature, unequivocally predicted that ambulatory care would continue to increase and hospital care would decrease. Although there have been slight variations from year to year, the authors indicated that the present trends will continue into the foreseeable future. The high costs of inpatient care will continue to cause shrinkage and consolidation of hospital delivery of care, while the delivery of ambulatory care will increase.

Every author who discussed the delivery of health care suggested that preventive care is needed to avoid the pain, suffering, and expense of the curative care. The medical community is primarily oriented toward cure rather than prevention. However, both the businesses that pay for worker insurance and the health maintenance organizations (HMOs) that provide care to workers, find it profitable to keep employees and clients healthy. The profitability of good health for workers will result in greater efforts toward the prevention of illness. Since preventive care is primarily delivered in ambulatory care settings, an increase in preventive care results in increased ambulatory care.

As the American population ages, there will be more chronic illnesses that cannot be cured with one or a few visits to a health care practitioner. Care for chronic illness is primarily delivered in ambulatory care settings. Thus, the graying of America will result in an increasing demand for ambulatory health care.

The need for nurses was another change in health care that was investigated. It is predicted that if the overall trend in the supply of nurses continues the same, there will not be enough nurses to meet future demands. However, the supply will continue to cycle with economic conditions. During a recession some nurses, who have been out of the work pool, return to the work force to augment family incomes. On the other hand, good economic times with low unemployment of heads of households tend to decrease the number of nurses in the work force. Even so, the overall need for both vocational and registered nurses will increase and for the rest of the century, the supply of nurses will not keep up with the demand.

In summary, all the trends identified in the literature indicate a continuing growth in ambulatory care. The high cost of hospital care is forcing clients to seek care in ambulatory settings, thus expanding their growth. Preventive care, delivered in ambulatory facilities, is increasing because it saves money. Chronic illness, seen in the aging population, is swelling the need for ambulatory care. Finally, there will be an increasing need for more nurses to work in ambulatory care settings.

Ambulatory care directors. Three directors of ambulatory care facilities in Long Beach were interviewed. They all responded that they felt ambulatory care would grow in the next five years and also in the next ten years. The directors gave the following reasons. Andrastek, (1992), the regional director of a large corporate HMO, said that ambulatory care is an efficient, cost-effective way to deliver excellent health care to a large number of people; therefore, it will continue to grow, especially in the areas of home health and day-surgery.

Malloy (1992), the director of a Los Angeles county ambulatory care clinic, stated that ambulatory care has already increased in Los Angeles county facilities and will continue to increase gradually over the next ten years. Shorter stays in the hospital mandate follow-up care in the community in ambulatory care facilities. Urgent care centers are developing rapidly to provide care, early in an illness, so clients will not become so sick that they require hospitalization. The plans to implement the federal government recommendations for "Healthy People 2000" are well underway and they are primarily focused on ambulatory delivery of health care.

Robbins (1992), the director of a large, local, privately owned, ambulatory care facility, explained that hospital care costs are so high that their business and industrial customers cannot afford to provide hospitalization benefits when employee health problems can be managed on an ambulatory care basis. Also, the aging population, with many chronic illnesses, needs on-going ambulatory management to maintain reasonable health and prevent the costly hospitalizations. Robbins feels that the area of greatest growth will be in ambulatory surgery. New laser technology is permitting surgeons to do major surgery such as gynecologic procedures and cholecystectomies on a day-surgery basis.

Executive officer of the BVNPTE. The Executive Officer of the BVNPTE, Haynes, (2/25/1992) responded to a question about LVN ambulatory care job growth by commenting that the jobs would increase for five years and then might level off for the following five years. She feels that growth in ambulatory care jobs for LVNs will increase because ambulatory care is cost effective and many clients need continuing care after early discharge from the hospital. Also, Haynes feels that clients need preventive care that is best given on an ambulatory care basis. Haynes believes that health care reform will occur in the next five years, with increases in ambulatory care during that time, but once the reforms are in place, she sees a period of stabilization when there will be only the changes needed to accommodate the increasingly aging population.

LBCC vocational nursing advisory committee. The members of the Vocational Nursing Program Advisory Committee were surveyed to determine the agency's need for vocational nurses and to ask whether the maximum number of vocational nursing students should be admitted to the VN program. Twelve of twenty-two community members of the advisory committee responded to the survey for a response rate of fifty-five percent. All twelve agency representatives responded "yes" that more vocational nurses are needed and that LBCC should admit the maximum number of vocational nursing students.

In summary, the literature about recent changes in health care delivery, and interviews with three directors of ambulatory care agencies showed that there is, and will continue to be, growth in ambulatory care facilities. Haynes (2/25/1992) responded that there is a need to educate more vocational nurses to give care in ambulatory care facilities. The members of the LBCC VN Advisory Committee reported a continuing need for more vocational nurses in Long Beach, California.

Structural Revisions of the VN Program to Support an Ambulatory Care Experience

The five full-time members of the vocational nursing faculty reviewed three documents: the "Long Beach City College Philosophy," "Curriculum Objectives," and "LBCC Taxonomy of Nursing Diagnoses, Based on Orem's Theory of Nursing" to determine that the curriculum structure supports an ambulatory care experience (see Appendix H, page 276.)

Philosophy and curriculum objectives. The faculty determined that the philosophy supported an emphasis on wellness and prevention of illness (see Appendix H, page 277). However, the review related to the ambulatory care experience and nursing diagnosis revealed that neither nursing diagnosis nor the ambulatory care experience were adequately supported in the philosophy. To resolve this problem, the faculty added the following section to the philosophy in June of 1991.

> Vocational nursing education is the preparation of beginning level nurses who have the knowledge and skills to care for stable clients. These clients may be adults or children **who need** hospital, skilled nursing, or **ambulatory care for acute or chronic illnesses**. The California Vocational Practice Act (1987:92, 94) declares "the practice of licensed vocational nursing to be a profession," that is "practiced under the direction of a licensed physician, or registered professional nurse." Students may terminate their formal nursing education upon completion of the vocational nursing program, or may continue to higher levels of professional nursing education. In either case, they must have a strong foundation of basic nursing theory, **skill in using the language of nursing to communicate with other health care workers**, and socialization into the ethics, responsibilities, and privileges of professional client care.

The faculty found that the "Curriculum Objectives" adequately supported the ambulatory care experience (see Appendix H, page 279).

LBCC taxonomy of nursing diagnoses. The nursing content taught in the LBCC VN program is defined by fifty-six selected nursing diagnoses. The faculty have categorized these fifty-six nursing diagnoses into a taxonomy by using Orem's universal self-care requisites as the organizing principle (see Appendix H, page 280). The instructors teach the students to use the nursing process to implement the nursing content related to the fifty-six nursing diagnoses.

When the LBCC VN faculty first evaluated the correlation between the taxonomy of nursing diagnoses and the ambulatory care learning tools, they determined that neither the taxonomy nor the ambulatory care learning tools were congruent with Orem's Self-Care Deficit Theory of Nursing. At that time, the taxonomy of nursing diagnoses was arranged by biological systems (medical model) rather than being classified under Orem's Self-Care Deficit Theory of Nursing (SCDTN). To rearrange the taxonomy, the faculty reviewed the literature and used the modified Delphi method reported in Chapter 3 (Abbott et al., 1988). Upon completion of this work, the fifty-six nursing diagnoses are arranged under Orem's Universal Self-Care Deficits and the faculty is satisfied that the Taxonomy of Nursing Diagnoses is congruent with Orem's Theory.

After comparing the Taxonomy of Nursing Diagnoses with the ambulatory care theory and clinical behavioral objectives (Appendix I, page 284) and the six learning tools (Appendix I, pages 287 through 292), the vocational nursing faculty agreed that there is an appropriate relationship among these documents.

Revisions in the Learning Materials for the Ambulatory Care Experience

The review of the literature related to Orem's SCDTN. The results of the literature review support the integration of Orem's SCDTN into the ambulatory care experience. The key findings that supported or influenced the revision of the ambulatory care experience are summarized below.

Nursing theory provides a framework that defines the nurse's role and directs each step of the nursing process. Fawcett (1984:199) says that Orem's SCDTN provides "an explicit and specific focus for nursing actions that is different from that of other health care professions." Fawcett also points out that the strengths of Orem's SCDTN are the idea of self-care for individuals along the health continuum, the supportive-educative nursing system, and the theory's usefulness for individuals in different settings and age groups. Fawcett's comments helped justify using Orem's SCDTN as the organizing principle for the ambulatory care experience. Her work also supports the use of supportive-educative nursing as a major nursing intervention in the ambulatory care setting.

The National League for Nursing (NLN) sets accreditation standards for nursing programs and requires a theoretical framework for accreditation of nursing programs (Deloughery, 1991). NLN believes that nursing theories are useful to educators because they "provide definitive content-organizing strategies for the curriculum" (Bevis, 1989:99). "Nursing models can direct each component of nursing practice and assist nurses to collect, organize, and classify data; understand, analyze, and interpret the client's health situation; plan, implement, and evaluate nursing care; [and] explain nursing actions" (Deloughery 1991:49). NLN accreditation standards and the work of Fawcett, Bevis, and Deloughery suggested the major change in the six learning tools. The content was not changed radically, but the arrangement and classification of the content were modified to fit under Orem's universal self-care deficits.

Since 1970, ten nurse theorists have published books describing their own theories (Deloughery, 1991). From 1971 to 1991 Orem has written four editions of her book about the self-care deficit theory of nursing. Orem (1991) first described her theory in 1958 to give meaning to the nursing tasks being taught in a practical nursing training program sponsored by the U. S. Department of Education. Orem defined self-care as the personal care that human beings require each day and proposed that a person who is unable to provide self-care has a self-care deficit and has a legitimate need for nursing care. Some authors criticize Orem's SCDTN because the explanatory language is difficult to comprehend. However, her critics also praise the theory because it has found such wide acceptance in education, practice, and research (Parse, 1987). The finding that Orem's SCDTN was originally described as an organizing principle for a practical nursing program, supported the use of the theory in the LBCC VN Program, as did the facts that the theory has been published and has found wide acceptance in many areas of nursing.

Alfaro (1990) and Carpenito (1992) explain that nursing diagnoses are different from collaborative problems and from medical diagnoses. A nursing diagnosis describes a human response to an actual or potential health problem. The response can be identified and independently treated by a nurse. A collaborative health problem is a complication of a medical problem that a nurse may treat independently or in collaboration with a doctor. A medical diagnosis is a pathophysiological problem of an organ or body system that is identified and treated by a doctor (Steiger and Lipson, 1985; Alfaro, 1990; Carpenito, 1992). These distinctions are important when nursing assessment instruments are being devised. During the development and revision of the ambulatory care learning tools, these characteristics were carefully considered to make sure the nursing students were not directed into areas of medical assessment or care.

When using Orem's SCDTN in the clinical setting, Steiger and Lipson (1985:35) suggest using the term "reason for contact" rather than "chief complaint," to describe the client's motivation for seeking care. This change was made on all the assessment forms. Steiger and Lipson also confirmed the selection of the areas of nutrition and exercise as subjects for two of the ambulatory care learning tools.

The review of the literature related to nursing diagnosis and critical thinking. The results of the literature review in the areas of nursing diagnosis and critical thinking support the LBCC faculty decision to teach critical thinking and had an important fundamental influence on the design of the ambulatory care learning tools. Basic educational theory related to the issue of critical thinking is the Taxonomy of Educational Objectives (Bloom et al., 1956). The taxonomy is the source for the idea that the cognitive domain is divided into knowledge and intellectual abilities that include comprehension, application, analysis, synthesis, and evaluation. Bloom and his colleagues equate critical thinking and intellectual abilities and feel that all levels of learners use all intellectual abilities.

The National Council of State Boards of Nursing, controls the state licensing examination for vocational nurses (NCLEX-PN). The NCLEX test plan does not include nursing diagnosis questions because NCLEX deems this knowledge and the critical thinking required to make a diagnosis to be beyond the scope of practice of vocational nurses. For vocational nursing students, NCLEX uses the 1960s version of the nursing process that leaves out the diagnostic step. This decision influences many vocational nursing schools to teach their students to depend on the registered nurse to think for them and to do only what they are ordered to do.

In June 1992, Haynes, the Executive Officer of the Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE) clarified the Board's position related to the issue of nursing diagnosis. The National Council's determination that making nursing diagnoses is the exclusive prerogative of the registered nurse constrains the BVNPTE in its interpretation of vocational nursing's scope of practice. The BVNPTE considers analysis and synthesis and thus critical thinking and making nursing diagnoses to be beyond the scope of practice for California vocational nurses. Haynes and her colleagues emphasize that it is essential for students be taught in such a way that they do not inadvertently go beyond the scope of practice for vocational nurses.

At Long Beach City College the vocational nursing faculty does not ascribe to the minimalist idea that vocational nurses do not do analysis and synthesis. In addition, the California Education Code (1992, Title V, Chapter 6, § 55002) requires that the associate degree vocational nursing curriculum include critical thinking. Therefore, the students are taught critical thinking and nursing diagnosis and the ambulatory care learning tools require students to make nursing diagnoses. However, based on the information from BVNPTE, the following information was added to the behavioral objectives for the experience before implementing any of the plans required in the learning tools, you must have the diagnosis and plan signed by your co-assigned nurse if s/he is an RN, or by her supervisor if she is not an RN (see Appendix I, page 284).

The review of the literature related to wellness and the prevention of illness. The original purpose for the learning tools was to guide students in assisting clients who were developing healthier life styles and preventing illness. All the authors in the literature review advocated nurses' support of wellness and illness prevention in the ambulatory care setting. Nursing's Agenda for Health Care Reform (1991) includes a plan to offer primary care in community settings (ambulatory care) and consumer responsibility for personal health and self-care. All six ambulatory care learning tools reflect the latter concept. The result of this literature review is confirmation that the subject matter for the six ambulatory care learning tools is emphatically supported and justified as an important component in a nursing curriculum.

The review of the literature related to nursing practice in ambulatory care. The authors consulted regarding nursing practice in ambulatory care supported the kind of nursing care taught during the ambulatory care experience. Four organizations, The Center for Research in Ambulatory Health Care Administration (Knutson, 1989), The American Academy of Ambulatory Care Nursing Administration (Hastings, 1987), Joint Commission on Accreditation for Hospitals (1990), and FHP, Inc. Regional Ambulatory Nursing (Geffers, 1990) set standards for ambulatory care nursing that are similar to those required of the students during the ambulatory care experience. This similarity justifies the inclusion of such practice in the ambulatory care experience.

The review of the literature related to evaluation of the ambulatory care experience. Five sources directly influenced the evaluation of the ambulatory care experience. The work of Tyler (1949) provided the format for the initial evaluation of the ambulatory care experience. McPherson and Dunatov (1978) asked the questions that served as the basis for the student survey, designed for this study. Levine (1978) contributed ideas related to paper-pencil testing of clinical knowledge. Hart and Waltz (1988) presented suggestions for outcome evaluation of student achievement in an ambulatory care experience. Borecky (1991) offered three survey instruments that will be modified for use in the ongoing evaluation of the ambulatory care experience.

Change of the text. The text, Health Assessment of the Older Adult, by Eliopoulos (1990) was adopted in 1991. Using this text, theory behavioral objectives were developed through collaborative work between the researcher and Callahan (1991), the lecture teacher for the LBCC VN course, Developmental Levels: Older Adult. These behavioral objectives relate to the Eliopoulos text and the other course documents and the program documents. Because a major emphasis in the ambulatory care clinical experience is the improvement of assessment skills, the adoption of this text resulted in a very close correlation of theory and clinical practice.

Revision of the clinical behavioral objectives. After the initial ambulatory care experience was approved, the researcher progressively revised the clinical behavioral objectives for added clarity (see Appendix I, page 284). The time limitations for the six learning tools were added in 1990.

Revision of the six learning tools. After evaluating the original ambulatory care learning tools, the faculty determined that in many ways they reflected the medical model rather than a nursing model. Both the content and the order of assessments for the learning tools needed to be changed to relate better to Orem's SCDTN, a nursing theory. For the revised versions of the "Quick Head to Toe," the "Self-Care History and Action Plan," and the "Nursing Physical Assessment," the assessments were arranged to follow a sequence of Orem's universal self-care requisites. The titles were also changed. The "Quick Head to Toe" became the "Quick Adult Assessment." The "History Form" was dropped, its content integrated into the "Self-Care History and Action Plan," and its title was changed to the "Self-Care History." The title for the "Physical Form" was changed to "Nursing Physical Assessment" (see Appendix I, pages 287 through 289).

The content of the last three learning tools was not changed since they had already been designed to reflect Orem's SCDTN. They were modified to improve the format and spacing. The titles were changed to make them more reflective of Orem's Theory. The "Drug Profile" became "Self-Care Management of Medications." The "Nutrition Profile and Teaching Plan" was re-titled, "Self-Care Management of Diet." The "Range of Motion and Muscle Strength Assessment and Plan," was changed to "Self-Care Management of Exercise" (see Appendix H, pages 290 through 292).

After comparing the ambulatory care learning tools with the LBCC VN program philosophy, curriculum objectives, and nursing theory, the faculty concluded that there was appropriate correlation between the supporting curriculum documents and the revised ambulatory care learning tools. After the revisions were completed, the vocational nursing faculty determined that the six learning tools used during the ambulatory care experience adequately relate to Orem's SCDTN.

Interview Results

Interviews with four nurse leaders. Ms. Billie Haynes, Executive Officer of the BVNPTE has a master's degree. Her clinical experience includes practice as a staff nurse, head nurse, supervisor, and director of nurses. She has taught nurse aides, vocational nurses, and registered nurses working for a bachelor's degree. Haynes has been the executive officer of the California BVNPTE for the last fourteen years.

Ms. Barbara Andrastek, is Associate Director of Nursing for FHP, Inc., a large corporate health care provider. Her preparation for the position includes a master's degree, twelve years of ambulatory care experience, work in public health, industrial medicine, post-anesthesia, surgery, and experience as a clinical instructor. Andrastek has worked for a private physician group, and has been both a staff nurse and a manager for a health maintenance organization.

Ms. Bernadine Malloy is Director of Nurses for Long Beach Comprehensive Health Care, a Los Angeles county ambulatory care facility. Ten years of staff nursing at Los Angeles County/USC Medical Center, and a bachelor's degree, are a part of the preparation for her position. Malloy has been a head nurse, supervisor, assistant director of nurses, and has held in her present position, as director of nurses, for the last eight years.

Ms. Doris Robbins is Director of Nurses for Harriman Jones, a large, local, private ambulatory care agency. Preparation for the position includes a diploma in nursing, work as a nursing supervisor in a doctor's office, and a position as assistant director at Harriman Jones. Robbins has worked in ambulatory care for thirty-one years and has had her present position for the last year.

During the interviews with Haynes, Andrastek, Malloy, and Robbins, eight common questions were asked. The purpose of these questions was to obtain information about the future activities of vocational nurses related to wellness and the prevention of illness. These eight questions are listed below, with a summary of the responses following each question.

Question: In the next five years, will the amount of preventive nursing care practiced by LVNs in ambulatory care change?

Answers: Haynes said that the amount of preventive nursing care will remain the same because there will not be funding to make the change. However, she feels that prevention of illness is the ideal way to promote excellent health care.

Andrastek, Malloy, and Robbins all said preventive nursing care would increase. Andrastek commented that this would be due to the aging population needing more preventive teaching, especially in the area of lung, cardiac, cancer and diabetic teaching. Malloy said that by the year 2000 vocational nurses will have much more responsibility for basic prevention teaching and registered nurses would be doing only the teaching that requires more depth. Robbins said vocational nurses cost less, so they will be hired to do the job. She gave as an example, the fact that Medicare has approved payment for preventive mamograms so clients will have to be taught the advantages of the procedure so they will decide to have it done.

Question: Evaluate the following disease prevention efforts by LVNs as "essential," "supplementary," or "unnecessary": heart disease, cancer, hypertension, diabetes, emphysema, glaucoma, AIDS

Answers: Haynes, Malloy, and Robbins all feel that all the listed areas are "essential." Andrastek feels all are "essential," except for cancer teaching that is "supplementary," and glaucoma teaching that is "unnecessary."

Question: In the next five years, will the amount of wellness nursing care practiced by LVNs in ambulatory care change—Increase, Stay about the same, Decrease? The reason(s)?

Answers: Haynes, Andrastek, and Robbins all said wellness nursing care by vocational nurses will increase. Malloy thinks it will stay the same or increase. Haynes commented that it will be mandated that clients have access to this information. Andrastek suggested that the aging population needs more wellness information. Robbins feels that the younger doctors see the need for wellness education and are using educational programs more. At Harriman Jones the staff uses a "Health Management Resources" program to teach about diet, food supplements, obesity, and weight control. Nurses must follow these educational programs with reinforcement as needed.

Question: Use "essential," "supplementary," or "unnecessary" to evaluate the following wellness promotion efforts by LVNs: diet, exercise, stress control, weight loss, personal accident prevention, smoking cessation, and substance abuse control.

Answers: All four administrators felt all areas are "essential," except that Andrastek feels personal accident control is "unnecessary" and substance abuse control is "supplemental." Malloy commented that there should be an emphasis on safe sex and it should be added to the list of "essential" wellness promotion efforts.

Question: Do today's ambulatory care LVNs need skill in assessment in the following areas: brief baseline assessments, psychological function, social function, spiritual function, habits of daily living, neuro checks, respiratory function, cardiac function (edema and SOB), digestion and bowel function, sexual function, bladder function, and range of motion and muscle strength?

Answers: Haynes, Malloy, and Robbins think all the listed areas are "essential." Andrastek thinks that psychological function, social function, spiritual function, and range of motion and muscle strength are "supplementary." Malloy commented that she feels nurses must try to treat the "whole person."

Question: Do today's ambulatory care LVNs need skill in teaching clients about the following: mental health and stress management, psychosocial and spiritual functioning, habits of daily living such as basic nutrition, weight loss, dental health, bodily cleanliness, home management of diseases such as stroke, Alzheimer's Disease, asthma, emphysema, congestive heart failure, and diabetes, management of physiologic functioning such as bowel elimination, bladder function and exercise, substance abuse control and smoking cessation, personal accident prevention?

Answers: Haynes, Malloy, and Robbins feel vocational nurses need skill in teaching all the above areas. Malloy again wanted to add safe sex practices. Andrastek feels all areas should be taught except psychosocial and spiritual functioning and personal accident prevention.

Question: Today, how should the LVN role in ambulatory care be defined? Evaluate the following areas as "essential," "supplementary," "unnecessary"; make initial (five minute) baseline assessments, take vital signs, prepare the client to be examined by the doctor, assist the doctor, administer medications, teach clients to implement medical orders to manage their illness, teach clients to make life-style changes to manage their illness, and help clients to change their life styles to prevent specific illness.

Answers: Haynes feels all areas are "essential" but feels the tasks of preparing the client to be examined by the doctor and assisting the doctor are mundane tasks that do not require any additional student learning. Andrastek felt all areas are "essential" with the exception of the last two that are "supplementary": teach clients to make life-style changes to manage their illness, and help clients to change their life styles to prevent specific illness. Robbins commented that it is extremely important for the nurse to prioritize the tasks that can be accomplished.

Question: Five years from now, how should the LVN role in ambulatory care be defined? Rank the included areas as "essential," "supplementary," "unnecessary": make initial (five minute) baseline assessments, take vital signs, prepare the client to be examined by the doctor, assist the doctor, administer medications, teach clients to implement medical orders to manage their illnesses, teach clients to make life style changes to manage their illnesses, help clients to change their life styles to prevent specific illness, and teach clients to adopt generally healthier life styles.

Answers: All answered that all areas are "essential." Haynes was asked what she thought would happen in ten years and she replied that she feels the same areas will still all be "essential."

Summary of the interviews with four nurse leaders. The executive officer of the BVNPTE and three ambulatory administrators agreed that wellness and prevention of illness teaching by vocational nurses would increase in the future. All administrators agreed that vocational nurses in ambulatory care should be able to make assessments in the following areas: brief baseline assessments, psychological function, social function, spiritual function, habits of daily living, neuro checks, respiratory function, cardiac function (edema and SOB), digestion and bowel function, sexual function, bladder function, and range of motion and muscle strength. The four interviewees agreed that vocational nurses should be able to teach clients about mental health and stress management, psychosocial and spiritual functioning, habits of daily living such as basic nutrition, weight loss, dental health, bodily cleanliness, home management of diseases such as stroke, Alzheimer's Disease, asthma, emphysema, congestive heart failure, and diabetes, management of physiologic functioning such as bowel elimination, bladder function and exercise, substance abuse control and smoking cessation, and personal accident prevention. All four experts also agreed that both now and five years from now the role of the vocational nurse should include the following tasks: make initial (five minute) baseline assessments, take vital signs, prepare the client to be examined by the doctor, assist the doctor, administer medications, teach clients to implement medical orders to manage their illness, teach clients to make life-style changes to manage their illness, and help clients to change their life styles to prevent specific illness.

Wellness, prevention of illness, teaching, and specific nursing tasks are major parts of the ambulatory care experience learning tools. The responses of these nursing leaders who agree that vocational nursing students should be learning to promote wellness, prevent illness, teach, and do specific nursing tasks supports and gives validity to the inclusion of this subject matter in the learning tools.

Interviews with three ambulatory care administrators. Six additional questions were asked of the three nursing administrators. The purpose of these questions was to ascertain the administrators' opinions of the structure of the ambulatory care experience. These six questions are listed below, with a summary of the responses following each question.

Question: Currently the time for the LBCC ambulatory care clinical experience is three days a week for four weeks. What suggestions would you make to improve this time structure—Make it shorter, Leave it the same, Make it longer?

Answers: Andrastek, Malloy, and Robbins all thought the time for the ambulatory care experience should remain the same. However, Malloy commented that her staff would like to see the experience be longer.

Question: The teacher for the LBCC ambulatory care experience visits the students once a week. Can students have a satisfactory to excellent learning experience in an ambulatory care facility without a full time teacher at the facility—Yes, Yes with qualifications, No?

Answers: All three administrators answered that the arrangements for the teacher are satisfactory. Andrastek commented that if there were more teacher contact, there could be more communication. Malloy commented that the present arrangement works well.

Question: Would it help students in an ambulatory care experience learn the beginning teaching role by being co-assigned for a day (or part of a day) with a specialty nurse—Yes, No? For example, diabetic teaching nurse, home care nurse, enterostomal nurse, or other specialty nurses?

Answers: All the administrators felt that co-assignment with a specialty nurse would be helpful. Andrastek said that each FHP, Inc. center has different specialty nurses so the assignment would have to be center specific. Malloy suggested a student assignment with her center's diabetic or hypertension specialist. Robbins offered a co-assignment with a cardiac, gastrointestinal, or neurological nurse specialist.

Question: Other than when the students are completing the work assigned to meet the course behavioral objectives, have you seen evidence that LBCC vocational nursing students are using Orem's Self-Care Deficit Theory of nursing—Yes, No? Do they use the term, "self-care," when speaking to you or other staff nurses, about the clients for whom they are caring? Do they use the term, "self-care," when speaking to clients? Do they incorporate self-care into their plan of care for the clients? Do they teach clients ways to help themselves to recover from illness? Do they teach clients ways to prevent illnesses? Do they teach clients ways to develop a healthier life style? Do they ask clients questions to evaluate whether the clients understand the concept of self-care, as contrasted with being dependent on others to care for their recovery or health?

Answers: Andrastek reported that she saw no evidence that the students are using Orem's Theory. Malloy said she saw evidence that the students in her facility are doing all the things listed above. Robbins said she did not know whether the students were doing the things listed above to use Orem's theory, because she did not work directly with them when they were interacting with clients.

Question: Presently, the two major elements of the ambulatory care experience are (1) the behavioral objectives and (2) the client assessment and nursing care learning tools. The behavioral objectives define how the assessment forms are to be used by the students. The learning tools guide the students in applying nursing concepts to ambulatory nursing practice. Please evaluate these learning tools (Quick Adult Assessment, Self-Care History, Nursing Physical Assessment, Self-Care Management of Medications, Self-Care Management of Diet, Self-Care Management of Exercise) for their usefulness in helping students apply nursing concepts to practice, using the scale: Excellent (E), Satisfactory (S), or Useless (U).

Answers: Andrastek said she does not know whether the learning tools are effective guides to ambulatory care nursing practice. Malloy and Robbins judged all the learning tools to be excellent.

Question: Is the balance between the assignments and the actual practice of ambulatory care appropriate?

Question: Does the required number of learning tools fit an experience with two days of orientation and ten days of clinical practice during four weeks?

Question: Is there an appropriate balance between the time spent on learning assignments and practice?

Question: Is the depth of learning assignments suitable?

Answers: Andrastek, Malloy, and Robbins all answered "yes," to the four questions above.

Summary of the interviews with three ambulatory care administrators. The three ambulatory care administrators agreed that the time duration and the teacher coverage for the ambulatory care experience are appropriate. They were all enthusiastic about having the students co-assigned with a nurse specialist. They gave three different answers: "yes," "no," and "do not know," to the question about student use of Orem's theory. Two administrators felt the learning tools are effective, and one did not know. All three said the balance of theory work and practice, the number of assignments, the time to do the assignments, and the depth of the assignments was appropriate. These comments and conclusions generally supported and verified the appropriateness of the ambulatory care learning experience. The enthusiastic acceptance of the idea of scheduling a time with a nursing specialist will direct future negotiations with the agencies to add this opportunity to the ambulatory care experience.

Interview with the executive officer of the BVNPTE. Haynes was individually asked five questions about the BVNPTE and nursing curricula.

Question: To determine your opinion of how the BVNPTE can integrate and implement the current changes in practice, especially the shift of care out of acute care facilities and into other forms of care, please say whether you agree with the following statements:

a. The Board will expect schools to make appropriate changes within the present regulatory structure (optional eighteen hour observation or up to fifty-four hour "hands-on" experience with weekly instructor visits).
b. The Board will expand the hours (fifty-four) that are presently permitted for "hands-on" experience in community health agencies to _____ hours.
c. The Board will require that all community health experiences be "hands on" rather than observational.
d. The Board will require a "hands-on" community health experience of ____ hours.
e. The Board will continue to permit instructors to visit community heath agencies on a weekly basis.
f. For experiences of more than fifty-four hours, the Board will require _____ instructor visits per week.

Answers: Haynes answered "yes" to parts "a" and "e." She felt that the Board and the schools should collaboratively make the decisions asked for in parts "b" and "f." She added that she felt that the Board would be interested in hearing requests from schools to increase their hours of ambulatory care. She answered "no" to parts "c" and "d." The Board could not require a specific amount of ambulatory care experience because some communities do not have enough ambulatory care experiences to support such a requirement, and they might not have appropriate settings to implement "hands-on" experiences instead of observational experiences.

Question: To ascertain how educators can inform the board about changes in nursing practice, please say whether you agree with the following statements:

a. Educators should communicate to their consultants and the executive officer with information and recommendations.
b. Educators should communicate to the president of the board and the chair of the education committee with information and recommendations.
c. Educators should attend meetings for formal dialogue between Board representatives and educators and share information recommendations
d. Educators should expect that the Board will keep abreast of changes in practice and will initiate appropriate regulatory changes as the times demand.

Answers: Haynes answered "yes" to questions "a," "c," and "d." She answered "no" to question "b" because the protocol is to go to the consultants first with formal recommendations. She listed several other ways of communicating with the Board: organize meetings between representatives of the Board and the California Vocational Nurse Educators (CVNE), send the Board copies of Newsletters published by vocational nursing organizations, send the board complementary copies of texts or journal articles that have been reviewed by faculty, with recommendations about the use of the text or article, and continue to network with each other and the executive officer and consultants to the Board.

Question: To determine your opinion of the future of the medical model, e.g., the cardiovascular, gastrointestinal and other systems, as a framework for vocational nursing curricula, please answer the questions below and say whether you agree with the statements that follow.

a. What percent of vocational nursing schools in California reports the type of theoretical framework they use for their curriculum? _____percent?
b. What percent of vocational nursing schools in California use the medical model as a framework for their nursing curricula? _____percent?
c. Is the medical model is an acceptable model for vocational nursing schools, now, and for the future?
d. If the medical model is an acceptable model now, will it be obsolete in _____ years?
e. Although many nursing schools still use the medical model it should be changed to a nursing model as rapidly as possible?

Answers: Haynes stated that all the vocational nursing schools in California report the type of theoretical framework they use when they prepare their accreditation reports, and about forty to fifty percent still use the medical model as a theoretical framework. She feels that the medical model will be obsolete in ten years and recommended that schools change to a nursing model as rapidly as possible. She commented that the Board does not recommend using the medical model, it is not "state of the art" in curriculum construction. In addition, the medical model does not support the nursing process as a fundamental guide for nursing actions.

Question: To determine your opinion of the future of nursing models to structure vocational nursing curricula, please state whether you agree with the following statements:

a. The Board should permit vocational nursing schools to function without a theoretical model for their curricula.
b. The Board should permit vocational nursing schools to use either a medical model or a nursing theory and only require them to identify and demonstrate the type of theoretical model they are using.
c. The Board should require vocational nursing schools to adopt a nursing theory that has been widely published in the nursing literature.
d. The Board should permit vocational nursing schools to use a locally developed, unpublished, nursing theory.
e. The Board should require vocational nursing schools to adopt a nursing theory as a curricular framework within the next ___ years.

Answers: Haynes answered "no" to questions "a" and "c." She commented that, for the most part, the Board does not want to use the term, "require" in relation to curricular guidelines but instead prefers to permit schools to have options to be creative in devising curricula that fit their particular requirements. She also said that published nursing theories are a viable option for schools and suggested that the Board would like to encourage vocational nursing schools to adopt a nursing theory to guide their curricula within the next ten years. Other comments were that the state board examination is leaning toward testing the students' abilities to make client assessments that are structured around nursing theories, and that the Board encourages schools to be aware of changes in nursing education by attending meetings of professional organizations such as CVNE.

Question: To determine your opinion of the place of nursing diagnoses in vocational nursing curricula please say whether you agree with the following statements.

a. "Nursing diagnosis gives all nurses a common language to communicate the uniqueness of the work that we do." (NANDA, 1990).
b. Nursing diagnosis is an essential step of the nursing process.
c. Educators should introduce nursing diagnosis to all vocational nursing students.

d. The Board should permit vocational nursing schools to teach nursing diagnosis as they wish.
e. The Board should permit vocational nursing schools to teach nursing diagnosis, with some limitations, such as _______
f. The Board should require vocational nursing schools to teach nursing diagnosis, without limitations, within the next ___ years.
g. The Board should permit vocational nursing schools to determine the type of nursing diagnostic terminology used to teach nursing diagnosis.
h. If nursing diagnoses are taught in vocational nursing schools, the Board should require that NANDA terminology be used.
i. Nursing diagnosis is the prerogative of professional registered nurses and instructors should not introduce the concept in a vocational nursing program.

Answers: Haynes answered all the questions "yes" with the exception of "f," "h," and the last part of "i." She did not feel the Board would "require" the use of nursing diagnosis or would "require" that the NANDA list of nursing diagnoses be used. She felt that nursing diagnosis is the prerogative of the registered nurse. However, instructors may introduce the concept in a vocational nursing program. Haynes reported that she has many ambivalent feelings about nursing diagnosis related to vocational nurses. Although nursing diagnoses should probably be introduced to VNs, the Board cannot require schools to teach them to analyze and synthesize data, so it cannot require vocational nurses to be taught to use the level of thinking that is necessary to make nursing diagnoses. On the other hand, in a nursing home that is less than one hundred beds, a vocational nurse may be working without a registered nurse on the premises and will be responsible for determining immediate nursing care problems for clients who are newly admitted or whose condition changes during the shift. These problems may also require immediate intervention, so the LVN will be doing analysis and synthesis if s/he provides appropriate care to the clients. Haynes emphasized that schools need to make sure students understand that they cannot make nursing diagnoses independently but they must work collaboratively with the registered nurse or in an emergency, get the approval of their work from the registered nurse.

Summary of the interview with the executive officer of the BVNPTE. Haynes feels that schools and the Board should work collaboratively to make adjustments to changes in delivery of health care such as the shift to ambulatory care. Schools should explore using ambulatory care facilities as educational sites and communicate changes in practice by contacting the executive officer or the nursing consultants. Although about half of the vocational nursing schools still use the medical model to direct their nursing curriculum, Haynes feels that this will change over the next ten years so that schools will be using nursing theoretical models. Haynes has ambivalent feelings about teaching vocational nurses to make nursing diagnoses. Licensed vocational nurses do need to know about this concept to be participating members of the interdisciplinary team, but they cannot make nursing diagnoses independently. The answers to these questions once again supported the work done to revise the ambulatory care experience at Long Beach City College.

Interview with the nursing consultant of the BVNPTE. Ms. Cheryl Anderson, Nursing Consultant for the BVNPTE has two master's degrees and doctoral work at the University of San Francisco. Practice as a staff nurse in Mississippi and California, positions as a head nurse, assistant director of nursing, and a family nurse practitioner, and teaching experience with nurse aides, vocational nurses, associate degree nurses, and bachelor's degree nurses have prepared her for this position. Anderson has been a nursing consultant for the BVNPTE for seven years.

Questions related to the structure of an ambulatory care experience. The purpose for the first series of questions was to assess the criteria for various structural aspects of an ambulatory care clinical experience. These questions were also asked of the LBCC vocational nursing faculty. The criteria, enumerated in Table 7 on page 156 were to be evaluated as "essential," "supplementary," or "unnecessary." Anderson's comments related to each criterion are listed after Table 7.

Table 7

STRUCTURAL CRITERIA FOR AN AMBULATORY CARE EXPERIENCE

CRITERIA	BVNPTE consultant's evaluation of criterion necessity		LBCC faculty* evaluation of criterion necessity		
			Percent		
			E**	S	U
Criteria related to the behavioral objectives					
1. The behavioral objectives are clear	Essential		100	0	0
2. The objectives detail all the important expected behaviors for each day of the experience	Unnecessary		81	19	0
3. The behavioral objectives require practice rather than initial learning experiences	Essential		75	25	0
4. The behavioral objectives require performance of routine nursing tasks (to teach reality)	Essential		81	19	0
5. The behavioral objectives require challenging nursing tasks (to avoid boredom)	Unnecessary		63	31	6
6. The opportunities to meet the objectives are available in the agencies	Essential		94	6	0
		Group Means	82.3	16.7	1.0
Criteria related to students					
7. The students have written copies of the required behavioral objectives	Essential		100	0	0
8. The students have enough experience that they can meet the behavioral objectives with minimal instructor support	Essential		94	6	0
9. The students are required to meet the behavioral objectives to complete the course	Essential		100	0	0
10. The students have forms to record their daily progress in meeting the behavioral objectives	Supplementary		94	6	0
		Group Means	96.9	3.1	0
Criteria related to the agency					
11. The agency administration approves of and supports the school's objectives for the students	Essential		100	0	0
12. Instructors inform the staff of the student behaviors required to complete the course requirements	Essential		94	6	0
13. The staff is able to perform the nursing skills required of the students (this sometimes requires in-service education by the instructor or agency)	Essential		94	6	0
14. The staff is willing to facilitate the students' meeting of the behavioral objectives	Essential		86	13	0
15. The staff is willing to countersign the students' records to verify that the students have met the daily objectives	Unnecessary		75	25	0
		Group Means	90.0	10.0	0
Criteria related to the instructor					
16. Each week, the instructor talks with the charge nurse, to determine his/her assessment of the students' accomplishment of the behavioral objectives	Essential		75	25	0
17. Each week, the instructor talks with several of the staff nurses, to determine their assessment of the students' accomplishment of the behavioral objectives	Supplementary		100	0	0
18. Each week, the instructor talks with each student and examines the student's records of behavioral objectives accomplished, to determine the student's accomplishment of the behavioral objectives	Essential		100	0	0
19. Each week, the instructor evaluates and records the students' accomplishment of the behavioral objectives	Supplementary		94	6	0
20. The instructor is willing to assess and resolve interpersonal problems between students and staff on a weekly basis	Supplementary		94	0	6
21. The instructor is willing to give guidance to the students to help them to meet the behavioral objectives	Essential		100	0	0
22. If needed, the instructor is willing to give brief individual instructions to the students to help them to meet the behavioral objectives	Essential		100	0	0
		Group Means	94.6	4.5	0.9
Means for consultant evaluations	Essential = 68.2% Supplementary = 18.2% Unnecessary = 13.6%	Means for all elements	90.6	8.8	0.6

* N = 16 ** E = Essential, S = Supplementary, U = Unnecessary

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Criteria related to the behavioral objectives. Anderson feels that it is "essential" that the objectives be clear; that they require practice rather than initial learning experiences; that they require performance of routine nursing tasks; and that the opportunities to meet the objectives are available in the agencies. She feels that it is not necessary for all the important expected behaviors to be listed, even though, on a survey visit for accreditation,the consultants must see the basic, entry level behaviors delineated in the behavioral objectives. Having challenging behavioral objectives is "nice" but is "unnecessary" for accreditation.

Criteria related to students. Anderson states that it is "essential" that the students have written copies of the required behavioral objectives; that they have enough experience to meet the behavioral objectives with minimal instructor support; and that they must meet the behavioral objectives to complete the course. Anderson feels that it is only "supplementary" and not required that the students have forms to record their daily progress in meeting the behavioral objectives.

Criteria related to the agency. Anderson indicates that it is "essential" that the agency administration approves of and supports the school's objectives for the students; that instructors inform the staff of the student behaviors required to complete the course requirements; that the staff is able to perform the nursing skills required of the students; and that the staff is willing to facilitate the students' meeting of the behavioral objectives. However, she feels it is "unnecessary" that the staff be willing to countersign the students' records to verify that the students have met the daily behavioral objectives.

Criteria related to the instructor. Anderson feels that it is "essential" that each week, the instructor talks with the unit supervising nurse, to determine his/her assessment of the students' accomplishment of the behavioral objectives; each week, the instructor talks with each student and examines the student's records of behavioral objectives accomplished, to determine the student's accomplishment of the behavioral objectives; and that the instructor be willing to give guidance to the students to help them to meet the behavioral objectives; and, if needed, the instructor be willing to give brief individual instructions to the students to help them to meet the behavioral objectives. She feels that it is "supplementary" that each week, the instructor talk with several of the staff nurses, to determine their assessment of the students' accomplishment of the behavioral objectives; that each week, the instructor evaluates and records the students' accomplishment of the behavioral objectives; and that the instructor be willing to assess and resolve interpersonal problems between students and staff on a weekly basis. She judges that weekly recording of behavioral objectives is an effective teaching tool but is not required for accreditation. The accreditation requirement is that the students' accomplishment of the behavioral objectives must be recorded at the end of the clinical experience. Anderson states that the instructor is only required to resolve interpersonal problems on an "as needed" basis when the problems are interfering with student learning or agency operation.

Summary of the criteria related to the structure of an ambulatory care experience. Anderson was asked to judge twenty-one criteria related to the structure of an ambulatory care experience. She feels that fourteen of the items are "essential," four are "supplementary," and three are "unnecessary." She considers all the items marked supplementary" and "unnecessary" as acceptable, but they are not BVNPTE requirements for accreditation.

Questions related to the skills to be learned in ambulatory care facilities. Anderson was also asked to use the terms, "essential," "supplementary," and "unnecessary," to evaluate a list of specific skills that are embedded in the six ambulatory care learning tools. The skills that Anderson evaluated are listed on Table 8, on page 160.

Skills that Anderson judges to be "essential." These skills are specified after the title of each group below.

1. Make a Quick Baseline Assessment: observe the client for visible signs of pathology; ask the client to relate his symptoms; and differentiate between an observation that requires a nursing action or a medical action.

2. Teach client health concepts: determine the client's knowledge of a subject, before teaching is begun; teach a health related subject to a client; and determine what the client understood.

3. Take a Self-Care History: ask questions about respiratory status (dyspnea, coughing, shortness of breath); nutritional status; excretory habits and hygiene; activity and rest; general comfort; the client's safety status; and spiritual satisfaction.

4. Perform a Nursing Physical Assessment: ask the client his/her reason for contact; examine the mouth with a light and tongue blade; teach a client to do a self-examination of her breasts; recognize the presence of barrel chest; recognize presence of abnormal breath sounds; recognize presence of abnormal heart sounds; palpate femoral and pedal pulses; recognize absence of bowel sounds; and evaluate basic mental status.

5. Assist with Self-Care Management of Drugs: gather data about prescription and over-the-counter drugs; and help the client set up a schedule for taking his/her medications.

6. Assist with Self-Care Management of Diet: elicit information about daily foods eaten.

7. Assist with Self-Care Management of Exercises: test bilateral muscle strength to assess for unilateral muscle weakness; test for intact sensation in the extremities; and with physician approval, teach appropriate exercises to a client, to improve range of motion and muscle strength.

In relation to "teaching health concepts," Anderson states that now, it is not a Board requirement that the student be taught how to teach clients. However, new regulations will be forthcoming, within the next few months, that will make this a requirement. Therefore, Anderson judged all the teaching skills to be "essential."

Skills that Anderson judged to be "supplementary". These skills are specified after the title of each group below.

1. Make a Quick Baseline Assessment: select the significant observations and prepare the client for the doctor's examination.

2. Perform a Nursing Physical Assessment: test for distance vision with a Snellen Chart and test hearing with an audiometer.

3. Assist with Self-Care Management of Medications: discuss problems about undesirable drug combinations with the physician.

4. Assist with Self-Care Management of Diet: sort the client's daily foods into basic food groups; estimate the daily calories eaten and deficiency or excess of calories; estimate the deficiency or excess of fluids drunk; and assist client to modify his/her diet, if needed.

Table 8

EVALUATION OF THE ELEMENTS OF THE AMBULATORY CARE LEARNING TOOLS

n=113 Percent of nurses who practiced element as students	n=57 % of VN programs that teach the element	ELEMENTS OF THE AMBULATORY CARE LEARNING TOOLS	BVNPTE consultant's evaluation of element necessity	n=16 Faculty judgment of element necessity in Percents		
				E*	S	U
		Make a Quick Baseline Assessment				
86	95	1. Observe the client for visible signs of pathology	Essential	100	0	0
92	98	2. Ask the client to relate his symptoms	Essential	100	0	0
88	90	3. Select the significant observations	Supplementary	100	0	0
91	81	4. Differentiate between an observation that requires a nursing action or a medical action	Essential	94	6	0
90	90	5. If a nursing action is needed, determine what nursing action should occur	Unnecessary	94	6	0
90	81	6. Prepare the client for the doctor's examination	Supplementary	75	25	0
90	89		Grp Mn	92	8	0
		Teach client health concepts				
88	84	7. Determine the client's knowledge of a subject, before the teaching is begun	Essential	100	0	0
81	90	8. Teach a health related subject to a client	Essential	100	0	0
83	93	9. Determine what the client understood	Essential	100	0	0
84	89		Grp Mn	100	0	0
		Take a Self-Care History by asking questions about				
88	97	10. Respiratory status (dyspnea, coughing, shortness of breath)	Essential	100	0	0
83	97	11. Nutritional status	Essential	100	0	0
87	97	12. Excretory habits and hygiene	Essential	100	0	0
88	97	13. Activity and rest	Essential	100	0	0
86	95	14. General comfort	Essential	100	0	0
82	61	15. Quality of solitude and social interactions	Unnecessary	86	14	0
85	86	16. The client's safety status	Essential	100	0	0
79	58	17. Normalcy of self-concept	Unnecessary	94	0	6
69	54	18. Spiritual satisfaction	Essential	72	21	7
83	82		Grp Mn	95	4	1
		Perform a Nursing Physical Assessment				
88	95	19. Ask the client his/her reason for contact	Essential	100	0	0
75	32	20. Test for distance vision with a Snellen Chart	Supplementary	44	50	6
73	18	21. Test hearing with an audiometer	Supplementary	38	50	13
64	70	22. Examine the mouth with a light and tongue blade	Essential	75	25	0
73	65	23. Teach a client to do a self-examination of her breasts	Essential	75	25	0
80	91	24. Recognize the presence of barrel chest	Essential	88	13	0
87	95	25. Recognize presence of abnormal breath sounds	Essential	94	6	0
82	84	26. Recognize presence of abnormal heart sounds	Essential	69	31	0
86	97	27. Palpate femoral and pedal pulses	Essential	100	0	0
81	95	28. Estimate the amount of ankle edema	Unnecessary	100	0	0
80	96	29. Recognize absence of bowel sounds	Essential	94	6	0
81	97	30. Evaluate basic mental status	Essential	100	0	0
79	78		Grp Mn	81	17	2
		Assist with Self-Care Management of Medications				
83	90	31. Gather data about prescription and over-the-counter drugs	Essential	100	0	0
74	74	32. Discuss problems about undesirable drug combinations with the physician	Supplementary	88	13	0
79	91	33. Help the client set up a schedule for taking his/her medications	Essential	94	6	0
79	85		Grp Mn	94	6	0
		Assist with Self-Care Management of Diet				
77	91	34. Elicit information about daily foods eaten	Essential	81	19	0
76	81	35. Sort the client's daily foods into the basic food groups	Supplementary	88	13	0
73	65	36. Estimate the daily calories eaten and deficiency or excess of calories	Supplementary	63	38	0
80	86	37. Estimate the deficiency or excess of fluids drunk	Supplementary	94	6	0
72	88	38. Assist the client to modify his/her diet, if needed	Supplementary	75	25	0
76	82		Grp Mn	80	20	0
		Assist with Self-Care Management of Exercise				
74	67	39. Estimate the degrees of flexion and extension of the major joints	Unnecessary	50	50	0
82	93	40. Evaluate range of motion of the major joints	Unnecessary	75	25	0
77	70	41. Test bilateral muscle strength to assess for unilateral muscle weakness	Essential	63	38	0
78	88	42. Test for intact sensation in the extremities	Essential	69	31	0
77	65	43. With physician approval, teach appropriate exercises to a client, to improve range of motion and muscle strength	Essential	75	25	0
78	77		Grp Mn	66	34	0
81	82	Means for consultant evaluations } Essential = 65% Supplementary = 21% Unnecessary = 14%	Total Mn	86	14	<1

* E=Essential, S=Supplementary, U=Unnecessary

Anderson judges that "select the significant observations" is only "supplementary" and not "essential." This response was so unexpected that the researcher questioned the choice at length, and even followed up with a written request for confirmation. Haynes, Executive Officer of the BVNPTE, along with five of the nursing consultants, gave the requested confirmation during a conference telephone call to the researcher on June 2, 1992.

Anderson's responses illustrate the extremely difficult position of the BVNPTE. The law must be interpreted to be understood. Depending on the context, a consultant may interpret the same words in two different ways in two different situations. The statement, "Selects the significant observations," is a case in point.

The BVNPTE has issued to each Program Director, a book of board policies and guidelines. From this book, is the following policy, "Skills Expected to Be Taught in Vocational Nursing Programs," (BVNPTE, 1984). This policy statement is found in Appendix B on page 242. The following material is quoted from that policy:

> The law (Section 2859 B and P Code) permits Licensed Vocational Nurses to perform those functions that have been taught in an accredited program in vocational nursing. The following list of skills developed by the Board of Vocational Nurse and Psychiatric Technician Examiners is not to be construed as limiting the L.V.N. to these functions alone. It is obvious that many of the functions listed include related functions not specifically delineated. In addition, licensees will learn new patient care functions related to new developments in health care that have not been envisioned at the time the list is developed.
>
> In order to ensure that graduates of all accredited vocational nursing programs are prepared to carry out the normally accepted functions of a licensed vocational nurse, the Board of Vocational Nurse and Psychiatric Technician Examiners has developed the following list of experiences for the guidance of faculty. Patient care and preparation of the equipment should be included in each experience (see last page of Appendix B, page 242 for the full text of this policy).

Following these statements is a list of forty-two skills. In the list is the skill statement: "Observations: significant changes in signs and symptoms."

According to this policy, the vocational nurse must be taught to observe significant changes in signs and symptoms. However, Anderson states that "Select the significant observations" is only a "supplementary" skill in response to an interview question. After having talked with Haynes, Executive Officer of the BVNPTE and five of the nursing consultants on June 2, this writer offers the following assessment of the inconsistencies between the written Board Policy and Anderson's responses.

The Board may be responding to pressure from the registered nursing community in general and the National Council of State Boards of Nursing, the producers of the state board examinations. These groups are searching for a means of clearly differentiating the role of the registered nurse and the vocational nurse. The California Vocational Nursing Practice Act (BVNPTE, 1987:95) differentiates between a registered nurse and a vocational nurse by stating that a vocational nurse must practice "under the direction of a licensed physician, or registered professional nurse" (§2860.7). The National Council has attempted to differentiate between the two professions by using an obsolete version of the nursing process that omits the analysis step. By doing this, the National Council has restricted the thinking processes of vocational nurses. Haynes (telephone interview, June 2, 1992) articulated the National Council's stance when she explained that analysis and synthesis are the exclusive prerogative of the registered nurse and are beyond the scope of practice for California vocational nurses. Based on this premise, Anderson must ignore the BVNPTE's own policy that requires schools to teach the skill, "Observations: significant changes in signs and symptoms," to make the judgment that it is only a "supplementary" skill that vocational nursing students "Select the significant observations."

According to the California Vocational Nursing Practice Act (BVNPTE, 1987:92), "The Legislature hereby declares the practice of licensed vocational nursing to be a profession" (§2840.5 (a)). By any definition of the term, "professional," a vocational nurse must be able to judge the significance of the observations s/he makes. It is impossible for a vocational nurse to report every observation s/he makes to a registered nurse, so that the registered nurse can decide which observations are significant. However, Anderson is clearly basing her decisions about the ambulatory care learning tools on the premise that vocational nurses do not do analysis and synthesis. Rationale for her decisions follows.

For "select the significant observations" Anderson states that the role of the vocational nurse is predominantly data gathering. The VN should report every observation to the registered nurse. The Board does not require the VN to select the observations that are significant.

Anderson feels that "prepare the client for the doctor's examination" is only "supplementary," because the requirement to prepare the client for the doctor's examination "depends on the type of examination." For the skills involved in performing a "nursing physical assessment," Anderson does not consider vision testing and hearing testing, to be "essential" skills, but instead ranked them as "supplementary." The Board does not list these two skills in the Board Policy, "Skills Expected to Be Taught in Vocational Nursing Programs." Nurses seldom perform these skills in hospital nursing, but they routinely perform them in ambulatory care settings.

In relation to the skills involved in "teaching about a normal diet," Anderson considers "sorting the client's daily foods into basic food groups," "estimating the daily calories eaten and a deficiency or excess of calories," "estimating the deficiency or excess of fluids drunk," and "assisting the client to modify his/her diet, if needed," to be beyond the present requirements. She stated that it is all right for the school to teach the concepts, but it is beyond the present scope of practice. However, she again reiterated that the new regulations that include a teaching component would be ready soon.

For the task of "taking a drug history," Anderson considers "discussing problems about undesirable drug combinations with the physician," to be "supplementary." It is an appropriate behavior, but is not required by the Board for accreditation.

Skills that Anderson judges to be "unnecessary". These skills are specified after the title of each group below.

1. Make a Quick Baseline Assessment: If a nursing action is needed, determine what nursing action should occur.
2. Take a Self-Care History: quality of solitude and social interactions; and normalcy of self concept.
3. Perform a Nursing Physical Assessment: estimate the amount of ankle edema.
4. Assist with Self-Care Management of Exercise: estimate the degrees of flexion and extension of the major joints; and evaluate range of motion of the major joints.

Anderson judges, "If a nursing action is needed, determine what nursing action should occur" to be "unnecessary," because the VN is not allowed to "operate alone." However, the VN can participate in deciding nursing actions. It is interesting to note that Anderson judges that it is "essential" for the vocational nurse to "differentiate between an observation that requires a nursing action or a medical action" but the vocational nurse is not to "determine what nursing action should occur," if nursing is needed.

For the set of skills, "taking a Self-Care History," Anderson feels that "quality of solitude and social interactions" and "normalcy of self-concept" are "unnecessary." She bases this decision on her premise that the vocational nurse cannot judge the "quality" of solitude and social interactions, nor can s/he decide whether a self-concept is within the range of normal. However, these concepts are a part of Orem's SCDTN. Orem originally devised her theory in 1959 "to upgrade practical (vocational) nurse training" (Orem, 1991:61).

Anderson considers "estimating the amount of ankle edema," to be "unnecessary" and states that the vocational nurse only needs to recognize the presence of edema. Anderson's judgment about "assessing range of motion and muscle strength," in relation to "estimating the degrees of flexion and extension of the major joints" and "evaluating range of motion of the major joints" is that they are "unnecessary." She feels that the vocational nurse only needs to recognize that there is some limitation of motion and does not need to estimate the degrees of flexion and extension, or evaluate the range of motion of major joints.

Summary of the skills to be learned in ambulatory care facilities. Anderson evaluates forty-three ambulatory care skills. She judges twenty-eight skills as "essential." She considers nine to be "supplementary" and six to be "unnecessary." She bases her judgment on the skills that need to be taught to meet accreditation requirements and on the NCLEX guidelines that suggest that it is beyond the scope of practice for vocational nurses to be required to think at the analysis and synthesis levels.

Suggestions for other schools. Suggestions were also requested for modifying the learning tools for their use by other schools. Anderson agrees that it would be appropriate for other schools to consider establishing an ambulatory care experience. She agrees that other schools should consider using community health agencies as clinical learning sites, even though they could only provide instructor support on a weekly basis. Anderson also feels that it would be appropriate for other schools to consider requesting an increase in hours of ambulatory care experience if an appropriate structure for the experience is in place and acceptable clinical sites are available.

Sociodemographic Information from the Four Surveys

The student survey sociodemographics. The thirty-five members of the vocational nursing class who graduated in spring 1992 were surveyed to determine the effectiveness of the LBCC ambulatory care learning tools. Thirty-four usable forms were returned. The students were assigned to six agencies. Eight were at FHP, Inc., Charter; six were at Harriman Jones and Long Beach Comprehensive Health Care; five were at FHP, Inc., Downey and Plaza; and four were at FHP, Inc., Long Beach. The students were of varied ethnic backgrounds: fourteen were Asian-Pacific Americans, three were African-Americans, four were Hispanics, ten were Caucasians, and three were from other groups. The students' ages ranged from nineteen to fifty, with an average age of thirty-two. Twenty-seven women and seven men were in the class, for a gender distribution of seventy-nine percent women and twenty-one percent men. Twenty-seven students had never worked in ambulatory care, and six had worked from one month to twenty-four months, with an average working time of eleven months. One student had worked in ambulatory care for twenty-seven years. This class was typical of the vocational nursing classes at Long Beach City College in age, ethnicity, gender, and working time in ambulatory care. The one student who was atypical was the student who had worked twenty-seven years in ambulatory care.

The faculty survey sociodemographics. There are eighteen full-time and part-time members of the Long Beach City College vocational nursing faculty. The researcher did not participate in the survey. Sixteen members of the faculty completed forms for a response rate of ninety-four percent. Five members of the faculty have bachelor's degrees, nine have master's degrees, and two are prepared at the doctoral level. Five faculty teach fundamentals of nursing, eight teach medical-surgical nursing, two are maternal-child specialists, and one is an administrator. The ambulatory care experience is a part of medical-surgical nursing.

The ages of the faculty range from thirty to sixty, with an average age of forty-eight. All but two graduated from their basic nursing program more than ten years ago. Two have taught for less than two years, eight have taught from one to ten years, and six have taught for more than ten years. Five have been at LBCC for less than a year, eight have been members of the faculty for one to ten years, and three have been members for more than ten years. Five members of the faculty have less than one year of experience in ambulatory care. Eight have one to ten years experience in ambulatory care, and three have more than ten years experience in this field.

In summary, the Long Beach City College vocational nursing faculty is a group of well educated, highly experienced professionals. They participate fully in faculty endeavors and have consistently supported this effort to update and improve the curriculum.

The ambulatory care staff nurses survey sociodemographics. The 113 ambulatory care staff nurses who responded to the survey work at five different FHP, Inc. ambulatory care facilities in the Long Beach/Orange County area. Twenty-seven percent are from Charter, twelve percent are from Downey, seventeen percent are from Plaza, twelve percent are from Long Beach, and thirty-two percent are from Fountain Valley.

Fifty-two percent of the nurses work in medical offices, fourteen percent in surgical offices, twenty-one percent in specialty areas, and thirteen percent in other areas. The medical assistants and registered nurses are each thirty percent of the survey group. Vocational nurses are forty percent of the group. Two to five years is the median length of service in FHP, Inc., with four years being the average length of service. More than sixty percent have worked for FHP, Inc. for more than two years. More than seventy-two percent have worked in ambulatory care for more than two years. Eighty-nine percent have worked for more than two years since graduation from their basic nursing programs. The ages of these ambulatory care staff nurses range from twenty to fifty-five years, with the average age being thirty-nine years.

The ambulatory care staff nurses answered several questions about their school experiences that prepared them for ambulatory care nursing. Fifty-eight percent had a clinical experience in ambulatory care while they were in their nursing programs. Of these, a little over half had direct teacher supervision during the ambulatory education. For ninety-three percent the experience was a "hands-on" participatory experience. The length of the experience ranged from one to more than sixteen days. Eighteen percent had one to four days, seven percent had five to ten days, sixteen had eleven to sixteen days and sixty-four had more than sixteen days experience in ambulatory care.

Over half of the graduates could not remember how many objectives they were required to meet during their ambulatory care experience. Of those who could remember, twenty-two percent had no behavioral objectives, fifty-two percent had one to ten objectives and twenty-six percent had more than fifteen objectives to meet.

In summary, the ambulatory care staff nurses are generally experienced in this field of nursing. They are fairly evenly divided among medical assistants, vocational nurses, and registered nurses, with the larger percentage being vocational nurses. As students, about half had a "hands on" clinical experience in ambulatory care, and over half of the students could not remember how many behavioral objectives they had to meet during the experience.

The vocational nursing programs survey sociodemographics. A total of fifty-seven survey forms was obtained from vocational nursing program directors of seventy-five active programs, for a return rate of seventy-six percent. The directors were asked ten questions about their communities, schools, and programs. This information is summarized on Table 9, on page 169.

1. Fifty-seven directors listed the community size in which their school is located. The schools were fairly evenly divided among small, medium, and large communities.
2. Fifty-seven directors categorized their type of program. Community colleges make up well over half of the schools, with adult education, private schools, regional occupational programs (ROP), and other types such as army programs, being the remainder.
3. Fifty-seven directors listed the length of sixty-three programs. Six schools listed both a full-time and a part-time program. The length of programs varied from two and one-half years to nine months. Of those who listed "other," one director stated her program was nine months in length and one listed fifteen months. Eight directors indicated their programs were about two years long. One listed two and one-half years for a part-time program and two listed, "other" only, without stating the length of time. In summary, about half of the schools that answered the survey have one and one-half year programs, one third have about one year programs, and the rest have programs of two years or longer.

Table 9

CALIFORNIA VOCATIONAL NURSING PROGRAMS SOCIODEMOGRAPHICS

Item	Element	Respondents	
		Number	Percent
1. Community size N = 57*	Small town	16	28
	Medium city	20	35
	Large city	21	37
2. Type of program N = 57	Community colleges	35	61
	Adult education programs	11	19
	Private schools	6	11
	Regional occupational programs	3	5
	Other types	2	4
3. Length of program N = 57 (63 programs)	Eighteen months	30	47
	One year	20	32
	Other	13	21
4. Size of classes N = 57	30 or fewer students (small)	31	54
	31 to 45 students (medium)	14	25
	46 to 60 students (large)	8	14
	Other	4	7
5. Frequency of admitting a class N = 57	Once a year	19	33
	Twice a year	17	30
	Other	21	37
6. Number of ambulatory care agencies in the community N = 56	None	2	<1
	1-5	20	38
	6-10	6	11
	More than 10	14	25
	Do not know	14	25
7. Size of ambulatory care agencies in the community N = 38	1-3 students in 1-6 agencies	29	76
	4-10 students in 1-5 agencies	5	13
	12-15 students in 1-4 agencies	4	11
8. Schools with an ambulatory care experience N = 55	Yes	31	56
	No	20	37
	Planning one	4	7
9. Schools that would use more ambulatory care, if permitted N = 52	Yes	9	17
	Already have more	3	6
	No	40	77
10. Full time teacher for ambulatory care clinical experience N = 41	Yes	11	27
	No	30	73

* N equals the number of California vocational nursing program directors who responded to the question.

4. Fifty-seven directors gave the size of class they admit. Over half of the programs are fairly small, with just under half being medium and large programs.

5. Fifty-seven directors stated the frequency of admitting a class. These are fairly evenly distributed among once a year, twice a year (each semester) and "other." The "other" group includes one third who admit from four to eight times a year, one third who admit the second of three semesters, and one third who admit every year and a half or every two years.

6. Fifty-six directors stated the number of ambulatory agencies in their communities. One fourth of the directors did not know how many ambulatory care agencies are in their community. Only two said there were no ambulatory care agencies in their communities. About forty percent said there were just a few agencies (1-5) and nearly the same number said there were more than six agencies in their communities. Of those who know how many agencies there are in their community, almost forty percent may not have enough agencies to support having an ambulatory care experience for their students, but over half would probably have enough agencies to establish an ambulatory care experience.

7. Thirty-eight directors answered this question. Three quarters of the directors said they have agencies in their community that could accommodate one to three students each and well over half of these directors stated that there are from one to six such agencies in their communities. Five directors said they have one to five agencies that could accommodate four to ten students. Four directors said they have one to four agencies that could accommodate twelve to fifteen students. In summary, almost all communities in California have one or more ambulatory care agencies that can accommodate one to three students at a time. Only four communities have ambulatory agencies that can accommodate a whole clinical group of fifteen students at one time. Therefore, for most schools, an ambulatory care assignment must be arranged so the students can learn without a teacher at the agency full-time.

8. Fifty-five directors stated that they do or do not have an ambulatory care experience. Thirty-one stated they do have an ambulatory care experience. Twenty-seven stated the number of days of the experience and indicated that the experience was from one to fifteen days long with the average length being five days. Twenty directors do not have an ambulatory experience. Four directors indicated that they are planning an ambulatory experience of two to nine days.
9. Fifty-two directors responded to the question: If permitted by regulations, would you schedule more than fifty-four hours of ambulatory care time? Nine directors answered that they would schedule more than fifty-four hours, if permitted, and stated that they would like to schedule from fifteen to 108 more hours for the experience. Three directors stated they already have more than fifty-four hours and they have from eighteen to sixty-six more hours. Forty directors would not schedule more hours of ambulatory care, even if it were permitted.
10. Forty-one directors indicated whether or not their students have a full time teacher during the ambulatory care experience. Eleven directors answered that their students have a full time teacher with them. Thirty directors stated the teacher is with the students less than full time. Twenty directors stated the amount of time the teacher is with the students: two teachers are in the hospital that houses the ambulatory care facility, two visit the ambulatory agency daily, and sixteen visit weekly.

The sociodemographic information on the directors' survey is summarized as follows. Over three fourths of the vocational nursing program directors in California responded to the survey. The VN programs were equally divided among small, medium, and large communities. All types of schools were represented with two thirds being community colleges, and one third being adult and private schools. The programs varied from nine months to two and one half years in length with half being three semesters and a third being one year long. More than half are small schools, admitting thirty or fewer students, a quarter are medium size schools, admitting thirty-one to forty-five students, and fourteen percent are larger schools, admitting more than forty-six students. The schools are about equally divided on frequency of admission of students: one third admit once a year, one third admit twice a year and one third admit on other schedules from every two months to every two and one half years.

Four percent of schools have no ambulatory agencies in their communities. Thirty-six percent have a few agencies, eleven percent have several agencies, and twenty-five percent have many agencies. Twenty-five percent of the directors did not know how many ambulatory agencies were in their communities. Three fourths of the schools can only place one to three students in each agency, while ten percent can put fifteen students in each agency. Over half of the schools have an average of five days in ambulatory care; over one third do not have such experiences; and a few are planning for an ambulatory care experience.

Seventeen percent of schools would like to use more than the maximum of fifty-four days in ambulatory care, and six percent already have more than the maximum. Three fourths of the schools use weekly or daily visits by the teacher, and one fourth use a full time teacher to supervise the ambulatory care clinical experience.

Responses to the Questions from the Four Surveys

The student survey responses. The thirty-four students were asked the following six questions about each of the six learning tools.

1. How many of the learning tools did you complete?
2. What percent of the information on the learning tools could you remember to assess without using the form?
3. What percent of the learning tools could you now complete in the assigned time?
4. What percent of the learning tools related to Orem's Self-Care Deficit Theory of Nursing?
5. How much of the information on the learning tools would be useful to you in helping the client to develop a healthier life style?
6. As a graduate, with what percent of clients could you have taken the time to help develop a healthier life style by completing the learning tools?

The students were asked to give the answers to the above questions about the six learning tools: Quick Adult Assessment, Self-Care History, Nursing Physical Assessment, Self-Care Management of Medications, Self-Care Management of Diet, and Self-Care Management of Exercise.

The range of completion of the learning tools was from ninety to ninety-nine percent. The Quick Adult Assessment and the Self-Care Management of Medications were completed at ninety-nine percent, and the Self-Care Management of Exercise was completed at ninety percent.

The range of remembered content for all the learning tools was from sixty-nine to eighty-six percent. The Self-Care Management of Medications was the best remembered at eighty-six percent, with sixty-nine percent of the Self-Care History being remembered.

The number of learning tools completed within the assigned time ranged from eighty to ninety-five percent. The Self-Care Management of Medications was most consistently completed within the time limits, at ninety-five percent. The nursing Physical Assessment was completed least well within the time limits, at eighty percent.

The percent of content that is related to Orem's SCDTN ranged from seventy-four percent to eighty-six percent. The Quick Adult Assessment was judged to be the most related to Orem's theory, at eighty-six percent. The Self-Care Management of Medications was the least related to Orem's theory, at seventy-two percent.

The utility value of the information gathered by the learning tools ranged from seventy-two to eighty percent. The Self-Care Management of Medications and the Self-Care Management of Diet were most useful at seventy-nine and eighty percent. The Nursing Physical Assessment was least useful at seventy-two percent.

The range for the percent of clients for whom time was available to complete the learning tools was seventy-nine to ninety percent. The Self-Care Management of Diet was the highest at ninety percent and the Nursing Physical Assessment was the lowest at seventy-nine percent.

In summary, the students judged all the learning tools to be useful and efficient. The lowest score was sixty-nine percent for the remembered content of the Self-Care History. The highest scores were ninety-nine percent for the completion of the Quick Adult Assessment and the Self-Care Management of Medications. The students ranked the Self-Care Management of Medications and the Quick Adult Assessment as the highest most often, while they ranked the Nursing Physical Assessment as the lowest. The student responses to the survey are presented in Figures 3 through 8, on pages 175 and 176.

The faculty responses to the survey questions. The Long Beach City College faculty evaluated the criteria for an ambulatory care experience. The faculty's collective assessment of the criteria is reported in percents on Table 7, on page 156

Behavioral objectives. All the faculty judged as "essential" that the behavioral objectives be clear. All but one instructor felt that it is "essential" that the opportunities to meet the objectives are available in the agencies and the one judged the criterion to be "supplementary." Thirteen felt that it is "essential" that the objectives detail all the important expected behaviors for each day of the experience, while three faculty considered this criterion to be "supplemental." The same distribution held for the criterion that the behavioral objectives require performance of routine nursing tasks (to teach reality). Twelve of the instructors assessed the criterion, the behavioral objectives require practice rather than initial learning experiences, to be "essential." Four felt this criterion is "supplemental." One person considered the criterion, "the behavioral objectives require challenging nursing tasks (to avoid boredom)" to be "unnecessary," while five thought the criterion was "supplemental." The consultant also judged this criterion to be "unnecessary."

Students. Two of the four criteria related to students were listed by all the faculty as "essential." These were that the students have written copies of the required behavioral

LBCC STUDENTS' EVALUATION OF THE AMBULATORY CARE LEARNING TOOLS
N = 34

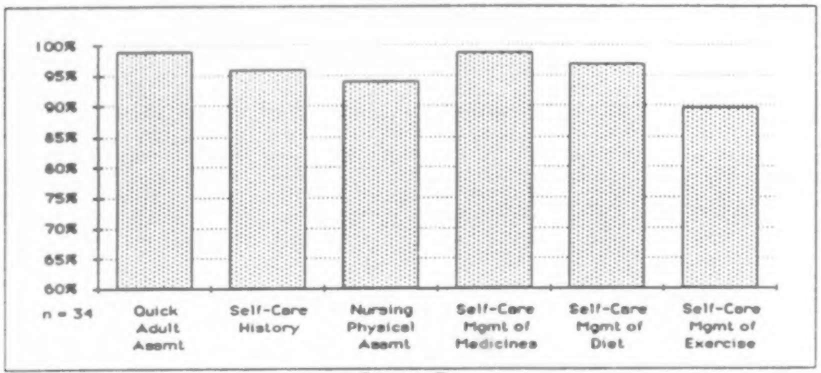

Figure 3
Number of Learning Tools Completed

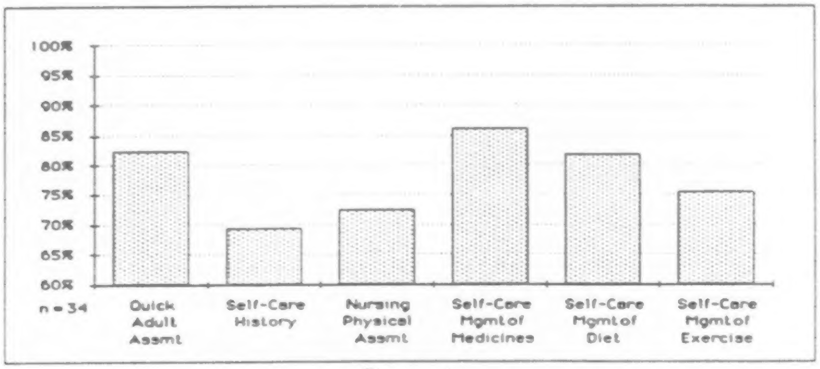

Figure 4
Remembered Content of the Learning Tools

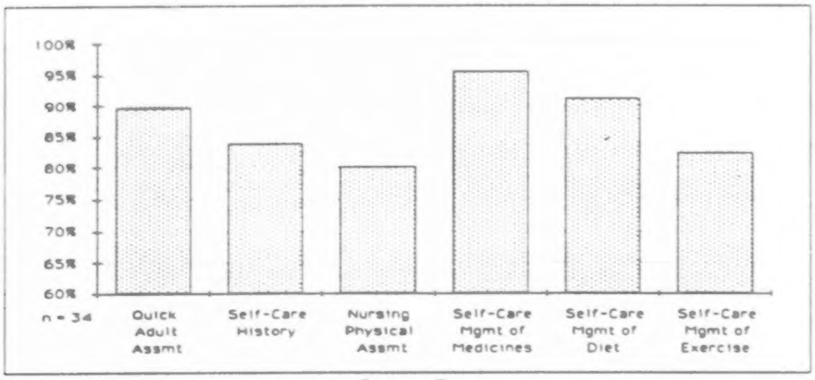

Figure 5
Number of Learning Tools Completed Within Time Limits

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LBCC STUDENTS' EVALUATION OF THE AMBULATORY CARE LEARNING TOOLS
N = 34

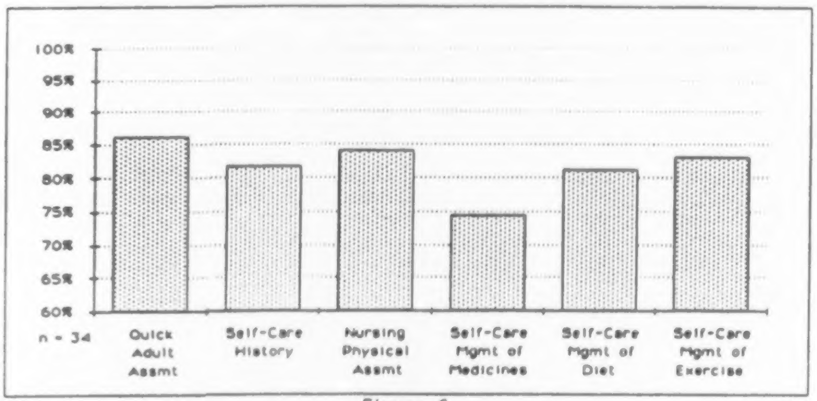

Figure 6

Percent Related to Orem's Self-Care Deficit Theory of Nursing

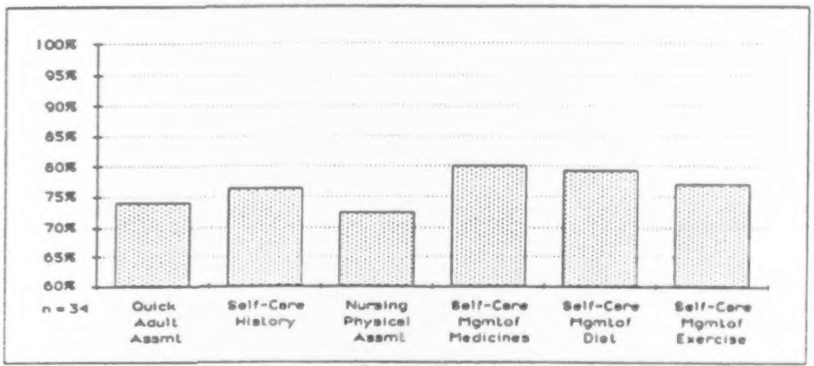

Figure 7

Utility Value of the Information Provided by the Learning Tools

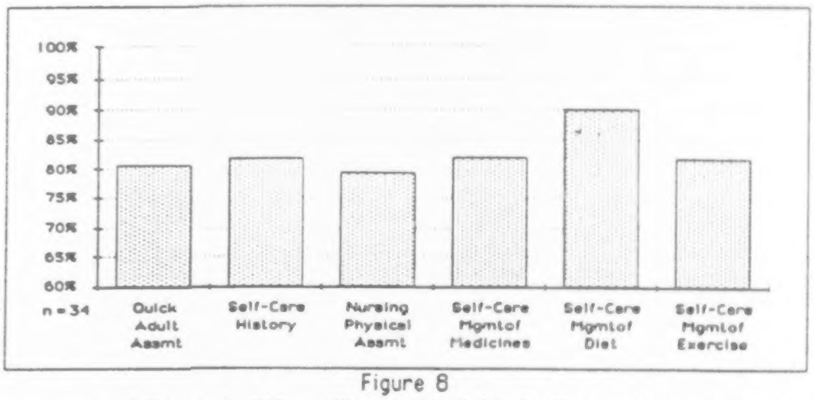

Figure 8

Percentage of Clients for Whom Time is Available for Selected Health Teaching objectives and that the students are required to meet the behavioral objectives to complete the course. The other two criteria were listed as "essential" by all but one person and that person assessed the criteria as "supplementary." These criteria were that the students have enough experience that they can meet the behavioral objectives with minimal instructor support and the students have forms to record their daily progress in meeting the behavioral objectives. No members of the faculty felt that any of the students' criteria were "unnecessary."

Agency. One criterion related to the agency was judged as "essential" by all the faculty. This criterion is that the agency administration approves of and supports the school's objectives for the students. Two criteria, that instructors inform the staff of the student behaviors required to complete the course requirements and the staff be able to perform the nursing skills required of the students, were considered "essential" by all but one person, who judged them to be "supplementary." Two of the faculty felt that it is only "supplementary" for the staff to be willing to facilitate the students' meeting the behavioral objectives. Twelve considered it "essential" while four felt that it is "supplementary" for the staff to be willing to countersign the students' records to verify that the students have met the daily objectives. The consultant judged this criterion as "unnecessary." No members of the faculty felt that any of the agency criteria were "unnecessary."

Instructor. Four criteria related to the instructor were judged to be "essential" by all the faculty. One of these "essential" areas is that the faculty consult with the staff nurses, to determine their assessment of the students' accomplishment of the behavioral objectives while the consultant felt this area is "supplementary."

Twelve faculty members felt that it is "essential" for the instructor to talk with the unit supervising nurse, to determine his/her assessment of the students' accomplishment of the behavioral objectives and four felt this criterion to be "supplementary." The BVNPTE consultant considered this area to be "essential."

All of the faculty consider the following criteria to be "essential": each week the instructor talks with each student and examines the student's records of behavioral objectives to determine whether the student has accomplished the behavioral objectives; the instructor is willing to give guidance to the students to help them to meet the behavioral objectives; and if needed, the instructor is willing to give brief individual instructions to the students to help them to meet the behavioral objectives.

All but one of the faculty members felt it is "essential" for the instructor to evaluate and record the students' accomplishment of the behavioral objectives each week and that person judged the criterion to be "supplementary." All but one instructor felt that it is "essential" that the instructor be willing to assess and resolve interpersonal problems between students and staff on a weekly basis, and that person felt this criterion is "unnecessary." The consultant judged this criterion to be "supplementary."

In Table 10 below, the group means stated in percentages, summarize the faculty's assessment of the criteria for an ambulatory care experience.

Table 10

FACULTY ASSESSMENT OF THE CRITERIA FOR AN AMBULATORY CARE EXPERIENCE

Types of Parameters Measured	Percentage Ranks for the Criteria		
	Essential	Supplementary	Unnecessary
Behavioral Objectives	82.3	16.7	1.0
Student Criteria	96.9	3.1	0
Agency Criteria	90.0	10.0	0
Instructor Criteria	94.6	4.5	0.9
Total of all means	90.6	8.8	0.6

The elements of the ambulatory care learning tools. The faculty was also asked to use the terms, "essential," "supplementary," and "unnecessary," to evaluate a list of specific skills that are embedded in the six ambulatory care learning tools. The skills that the faculty evaluated are listed in percentages on Table 8, on page 160. The skills that all the instructors judged to be "essential" are listed after the title of each group below.

1. Make a Quick Baseline Assessment: observe the client for visible signs of pathology; ask the client to relate his symptoms; and select the significant observations.
2. Teach client health concepts: determine the client's knowledge of a subject, before the teaching is begun; teach a health related subject to a client; and determine what the client understood.
3. Take a Self-Care History: ask questions about: respiratory status (dyspnea, coughing, shortness of breath); nutritional status; excretory habits and hygiene; activity and rest; general comfort; and the client's safety status.
4. Perform a Nursing Physical Assessment: ask the client his/her reason for contact; palpate femoral and pedal pulses; estimate the amount of ankle edema; and evaluate basic mental status.
5. Assist with Self-Care Management of Medications: gather data about prescription and over-the-counter drugs.

The skills that all instructors but one judged to be "essential" are listed after the title of each group below. In each case, the one instructor listed the skill to be "supplementary," except in the case of normalcy of self-concept that was judged to be "unnecessary" by the single instructor.

1. Make a Quick Baseline Assessment: differentiate between an observation that requires a nursing action or a medical action; and if a nursing action is needed, determine what nursing action should occur.
2. Take a Self-Care History: ask questions about normalcy of self concept.
3. Perform a Nursing Physical Assessment: recognize presence of abnormal breath sounds; and recognize absence of bowel sounds.
4. Assist with Self-Care Management of Medications: help the client set up a schedule for taking his/her medications.
5. Assist with Self-Care Management of Diet: estimate the deficiency or excess of fluids drunk.

Skills that fourteen instructors judged to be "essential" and two instructors listed as "supplementary" are as follows: quality of solitude and social interactions; recognition of the presence of barrel chest; discussion of problems about undesirable drug combinations with the physician; and sorting of the client's daily foods into the basic food groups.

Thirteen faculty felt that eliciting information about daily foods eaten is "essential" while three thought it is "supplementary." Those skills that twelve faculty members considered "essential" while four assessed them to be "supplementary" are as follows: Prepare the client for the doctor's examination; examine the mouth with a light and tongue blade; teach a client to do a self-examination of her breasts; assist the client to modify his/her diet, if needed; estimate the degrees of flexion and extension of the major joints; and with physician approval, teach appropriate exercises to a client.

Asking about spiritual satisfaction was determined to be "essential" by eleven instructors, while three felt it is "supplementary," and one considers it to be "unnecessary." Eleven instructors also judged recognizing the presence of abnormal heart sounds and testing for intact sensation in the extremities to be "essential," while five considered these skills to be "supplementary."

Ten faculty determined that estimating the daily calories eaten and determining the deficiency or excess of calories; and testing bilateral muscle strength to assess for unilateral muscle weakness are "essential," and six instructors judged those skills to be "supplementary." One skill, estimating the degrees of flexion and extension of the major joints is considered "essential" by half of the faculty and "supplementary" by the other half.

Two skills were considered "essential" by only seven and six of the faculty members, respectively: test for distance vision with a Snellen Chart and test hearing with an audiometer. Eight of the faculty judged these skills to be "supplementary." Two felt hearing testing to be "unnecessary" while one considered vision testing to be "unnecessary." In

Table 11 below, the group means stated in percentages, summarize the faculty's assessment of the elements of the ambulatory care learning tools.

Table 11

FACULTY ASSESSMENT OF THE ELEMENTS OF THE AMBULATORY CARE LEARNING TOOLS

Ambulatory Care Learning Tools	Percentage Rank of the Elements		
	Essential	Supplementary	Unnecessary
Make a Quick Baseline Assessment	92	8	0
Teach client health concepts	100	0	0
Take a Self-Care History	95	4	1
Perform a Nursing Physical Assessment	81	17	2
Assist with Self-Care Management of Medications	94	6	0
Assist with Self-Care Management of Diet	80	20	0
Assist with Self-Care Management of Exercise	66	34	0
Total of all means	86	14	<1

The ambulatory care staff nurses' responses to the survey questions. One hundred and thirteen ambulatory care nursing staff members answered questions regarding their educational preparation for work in ambulatory care. They were asked, "How did you learn to perform seven basic ambulatory care tasks?" These nurses were to respond, "From a classroom theory presentation," "In skills laboratory practice," or "Both." A second part of each of the seven questions asked, "Where did you practice with clients in performing the seven tasks" The nurses were to respond to this part of the question with one of the following answers: "in an ambulatory care facility," "in a hospital," "in both ambulatory care and hospital" "I did NOT practice this skill but it would have been helpful to have practiced it in school," and I did NOT practice this skill and it would NOT have been helpful to have practiced it in school." Finally, for each of the seven tasks, the elements of the task were listed. The nurses were requested to identify any part of the task that they did not practice. The results of the first two parts of this survey are listed in percentages on

Tables 12 and 13, on page 183, where they may also be compared with the results of the survey of vocational nursing schools. These results are also displayed in pie charts, Figures 9 and 10, on page 184.

The staff nurses who learned basic ambulatory care concepts only in the classroom, ranged from a low of twelve percent for making a baseline assessment, to a high of forty-three percent for assisting with self-care medication management. The mean percent for learning a concept only in the classroom is twenty-two percent. The nurses who learned these tasks only in campus laboratory, ranged from two percent for medication management to nine percent for teaching health concepts, with a mean of five percent. Learning the concept in both class and campus laboratory was much more common with means ranging from a low of fifty-five percent for medication management, to eighty-three percent for taking a self-care history, with a mean of seventy-three percent.

Staff nurses who practiced in ambulatory care settings ranged from six percent for assisting with self-care exercise management to twenty-seven percent for doing a nursing physical assessment, with a nineteen percent average. This was a larger percent than is reported by the directors about their programs' activities (see black wedges on the pie charts, Figure I0 on page 184). The staff nurses also practiced ambulatory care skills in the hospital. The range for this activity was thirty percent for assisting with diet management to forty-six percent for assisting with exercise management, with a thirty-eight percent mean. In both hospital and ambulatory care settings, twenty-five percent of staff nurses practiced making a quick baseline assessment compared with thirty-eight percent who assisted with self-care diet management. The mean for both hospital and ambulatory care was thirty percent. When the percentages for all settings are totaled, a low of seventy-eight percent of nurses practiced medication management as compared to a high of ninety-four percent who practiced taking a self-care history. The mean of the totals is eighty-seven percent of staff nurses who had practice in either ambulatory care, the hospital, or both.

Table 12

WHERE STAFF NURSES LEARNED AND TODAY'S VN SCHOOLS TEACH AMBULATORY CARE CONCEPTS

n=113	n=57		Percent							
			Class only		Campus lab only		Both class and campus lab		Total of schools that teach the concepts	Total of schools that do NOT teach the concepts*
# staff nurses	# of schools	CONCEPTS PRACTICED	Staff nurses	Today's schools	Staff nurses	Today's schools	Staff nurses	Today's schools		
100	57	Making a Quick Baseline Assessment	12	16	6	12	82	61	89	11
89	57	Teaching health concepts to clients	20	31	9	2	71	67	100	0
96	57	Taking a Self-Care History	17	28	4	4	79	63	95	5
93	56	Doing a Nursing Physical Assessment ...	13	9	4	11	83	66	86	14
88	57	Assisting with Self-Care Medication Management.	43	48	2	2	55	46	96	4
89	56	Assisting with Self-Care Diet Management	29	58	5	0	66	42	100	0
85	56	Assisting with Self-Care Exercise Management ..	20	11	6	12	74	75	98	2
		Mean frequencies for all listed ambulatory concepts	22	29	5	6	73	60	95	5
		Differences between the means	10		1		7			

* On the survey, staff nurses were not asked if they did NOT learn the concept

Note: Number of respondents may not equal listed n (113 and 57) due to some subject's failure to respond to each item.

Table 13

WHERE STAFF NURSES AND TODAY'S VN SCHOOLS PRACTICE(D) AMBULATORY CARE CONCEPTS

n=113	n=57		Percent									
			Practice(d) amb care concepts in amb care facilities		Practice(d) amb care concepts in hospitals		Practice(d) amb care concepts in both ambulatory care and hospitals		Totals WITH practice of the concepts		Totals with NO practice of the concepts	
# staff nurses	# of schools	CONCEPTS PRACTICED	Staff nurses	Today's schools	Staff nurses	Today's schools	Staff nurses	Today's schools	Staff nurses	Today's schools	Staff nurses	Today's schools
101	57	Making a Quick Baseline Assessment	26	2	42	74	25	14	92	90	8	10
94	56	Teaching health concepts to clients	20	4	31	62	34	30	85	96	15	4
98	57	Taking a Self-Care History	24	0	40	54	30	30	94	84	6	16
98	56	Doing a Nursing Physical Assessment ...	27	0	40	57	27	29	93	86	7	14
94	57	Assisting with Self-Care Medication Management.	13	0	34	63	31	26	78	89	22	11
96	54	Assisting with Self-Care Diet Management	19	0	30	61	38	26	86	87	14	13
94	54	Assisting with Self-Care Exercise Management ..	6	0	46	78	28	14	80	92	20	8
		Mean frequencies for all listed ambulatory concepts	19	1	38	64	30	24	87	89	13	11
		Differences between the means	18		26		6		2		2	

Note: Number of respondents may not equal listed n (113 and 57) due to some subject's failure to respond to each item.

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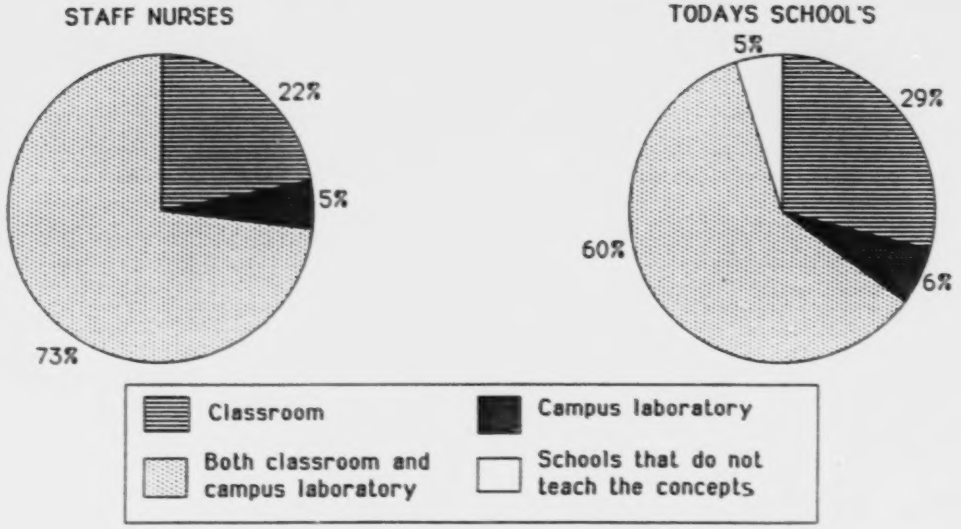

Figure 9
WHERE STAFF NURSES LEARNED AND TODAY'S VN SCHOOLS TEACH AMBULATORY CARE CONCEPTS

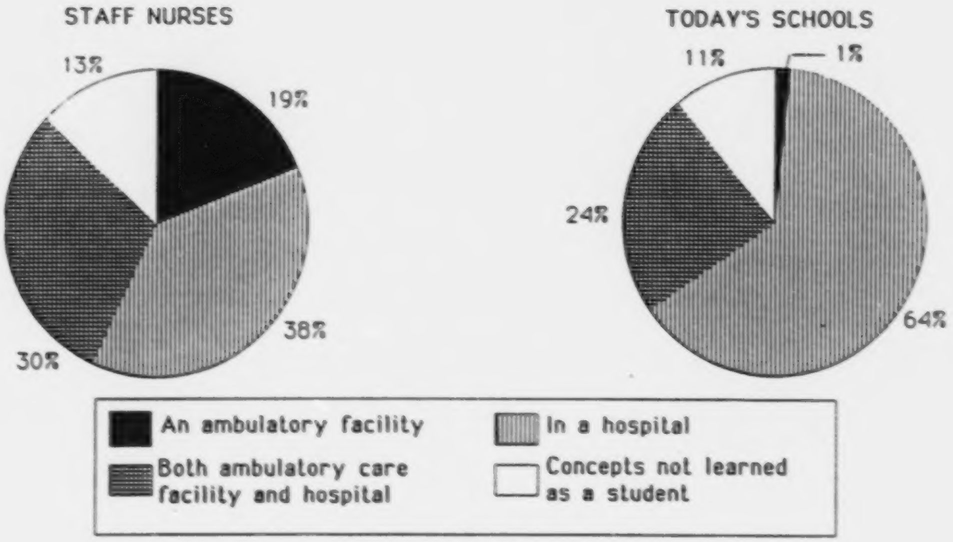

Figure 10
WHERE STAFF NURSES AND TODAY'S VN SCHOOLS PRACTICE(D) AMBULATORY CARE CONCEPTS

On the other hand, a low of six percent of the staff nurses had no practice in taking a self-care history, and a high of twenty-two percent had no practice in assisting with self-care medication management. An average of thirteen percent of staff nurses had no practice in implementing these skills.

In Table 14 below, the group means stated in percentages summarize where staff nurses practiced ambulatory care concepts.

Table 14

SUMMARY OF PLACES WHERE STAFF NURSES PRACTICED AMBULATORY CARE SKILLS

Place of Practice	Percent
In ambulatory care facilities	19
In hospitals	38
In both ambulatory care facilities and hospitals	30
Totals WITH practice of the concepts	87
Totals with NO practice of the concepts	13

The evaluation of the forty-three elements of the ambulatory care learning tools are listed in percentage form in Table 8, on page 160. On this table, the staff nurses' practice may be compared with the percent of vocational nursing programs in California that teach the elements, and with the necessity for the elements as evaluated by the BVNPTE consultant and the LBCC vocational nursing faculty.

More than eighty percent of the staff nurses practiced twenty-seven of the forty-three elements. Sixty-four to seventy-two percent of the nurses practiced the other sixteen elements. The sixteen least frequently practiced elements are listed as follows.

1. Take a Self-Care History: ask questions about normalcy of self-concept and spiritual satisfaction.

2. Perform a Nursing Physical Assessment: test for distance vision with a Snellen Chart; test hearing with an audiometer; examine the mouth with a light and tongue blade; and teach a client to do a self-examination of her breasts.

3. Assist with Self-Care Management of Medications: discuss problems about undesirable drug combinations with the physician; and help the client set up a schedule for taking his/her medications.

4. Assist with Self-Care Management of Diet: elicit information about daily foods eaten; sort the client's daily foods into the basic food groups; estimate the daily calories eaten and deficiency or excess of calories; and assist the client to modify his/her diet, if needed.

5. Assist with Self-Care Management of Exercise: estimate the degrees of flexion and extension of the major joints; test bilateral muscle strength to assess for unilateral muscle weakness; test for intact sensation in the extremities; and with physician approval, teach appropriate exercises to a client to improve range of motion and muscle strength.

None of these areas that were learned by a lower percentage of staff nurses are surprising. Normalcy of self-concept is Orem terminology, that may not be commonly understood in the wider nursing community. The nurses may have learned the element with different terminology. Spiritual satisfaction has always been a sensitive subject in predominantly public nursing schools. The elements of a physical assessment are a relatively new aspect of student learning in schools of nursing. The testing of vision and hearing are unique to ambulatory care settings and students seldom practice these tests in hospitals, where most student nursing experience is gained. It is surprising that only seventy-three percent of nurses were taught to teach clients to do self-examination of their breasts. However, the care of breasts and other genital areas are sensitive topics that may have been avoided by the schools. Discussing elements of care, collaboratively with a physician, is also a more recent learning experience for many nursing students. It is a little unexpected that taking responsibility for helping the client to manage his/or her medications at home, was learned by less than eighty percent of the nurses. However, this element was only slightly below the cut-off at seventy-nine percent.

In school, the staff nurses learned the last two areas of ambulatory care least frequently. These areas, self-care management of diet and exercise have not been important aspects of the medical model of nursing care that emphasizes cure of disease.

Although most nurses support the importance of diet and exercise in prevention of illness and maintenance of wellness, many of these nurses have not been taught effective ways of approaching and teaching these subjects to clients. Also, since diet and exercise often involve long term, life style changes, many nurses feel these areas are beyond the time limits and administrative support of their practice.

The VN program directors' responses to the survey questions. From a total of seventy-five vocational nursing programs, the program directors of fifty-seven programs responded to questions about seven routine ambulatory care nursing activities. The directors stated whether their students learned to perform these activities in the classroom, in a campus laboratory, in both classroom and campus laboratory, and in neither classroom nor campus laboratory. The directors also identified the places where their students practice the seven concepts: in ambulatory care facilities, in a hospital, or in both hospital and ambulatory care facilities. In addition, the directors identified the elements of the seven concepts that their students do not practice.

On Table 12, on page 183 is a comparison of the places where today's California vocational nursing students are learning and where ambulatory care staff nurses have learned about seven basic ambulatory care concepts. The California vocational nursing students who learned basic ambulatory care concepts only in the classroom ranged from a low of nine percent for doing a nursing physical assessment to a high of fifty-eight percent for assisting with self-care diet management. The mean percentage for learning a concept only in the classroom is twenty-nine percent. The students who learned these tasks only in a campus laboratory ranged from zero percent for assisting with diet management to twelve percent for making a quick baseline assessment and assisting with self-care exercise management, with a mean of six percent. Learning the concept in both class and campus laboratory was much more common with the means ranging from a low of forty-two percent for diet management, to seventy-five percent for assisting with self-care exercise management, with a mean of sixty percent.

A total of one hundred percent of schools teach students how to teach health concepts to clients and teach how to assist with self-care diet management. A total of more than ninety percent of schools teach students how to take a self-care history, how to assist with self-care medication management, and how to assist with self-care exercise management. However, it is notable that a total of six California schools do not teach their students to make a quick baseline assessment and eight schools do not teach their students to do a nursing physical assessment. This is significant considering the statement in the "The NCLEX-PN Test Plan" (NCSBN, 1989:3) that explains, "The entry-level practical nurse acts . . . in a more independent role when participating in the data collecting [assessment] and implementing phases of the nursing process."

From zero to four percent of California schools provided the opportunity for students to practice ambulatory care skills in an ambulatory care setting. These percentages are much smaller than were reported by the ambulatory care staff nurses who learned nineteen percent of ambulatory care skills in ambulatory care settings (see black wedges on the pie chart, Figure l0, on page 184). The students primarily practiced ambulatory care skills in the hospital. The range for hospital practice was fifty-four percent for taking a self-care history up to seventy-eight percent for assisting with exercise management with a mean of sixty-four percent. In both hospital and ambulatory care settings, only fourteen percent of the students practiced making a quick baseline assessment compared with a maximum of thirty percent who practiced both teaching health concepts to clients and taking a self-care history. The mean for schools providing student practice in both hospital and ambulatory care settings was twenty-four percent. When the percentages for all practice settings are totaled, a low of eighty-four percent of schools provided the students with practice taking a self-care history up to a high of ninety-six percent, who provided practice teaching health concepts to clients. The mean of the totals is eighty-nine percent of students who had practice in either ambulatory care, the hospital, or both.

Only four percent of the schools did not provide students with practice in teaching health concepts to clients, up to sixteen percent of schools that did not furnish practice in taking a self-care history. An average of eleven percent of schools did not give students practice in implementing these basic ambulatory care concepts. In Table 15 below, the group means, stated in percentages, summarize where students practiced ambulatory care concepts.

Table 15

SUMMARY OF PLACES WHERE STUDENTS PRACTICED AMBULATORY CARE SKILLS

Place of Practice	Percent
In ambulatory care facilities	1
In hospitals	64
In both ambulatory care facilities and hospitals	24
Totals WITH practice of the concepts	89
Totals with NO practice of the concepts	11

The evaluation of each of the forty-three elements of the ambulatory care learning tools are listed in percentage form on Table 8, on page 160. On this table, the teaching patterns in California vocational schools may be compared with the percent of ambulatory care staff nurses that practiced the elements as students, and with the necessity for the elements as evaluated by the BVNPTE consultant and the LBCC vocational nursing faculty.

More than eighty percent of the schools provided their students with the opportunity to practice thirty-one of the forty-three elements of the ambulatory care learning tools. Fifty-four to seventy-four percent of the schools practiced ten of the remaining elements. One element was practiced by only thirty-two percent of schools and one element was practiced by only eighteen percent of schools. The twelve least frequently practiced elements are listed as follows.

1. Take a Self-Care History by asking questions about the following: quality of solitude and social interactions, normalcy of self concept, and spiritual satisfaction.

2. Perform a Nursing Physical Assessment: test for distance vision with a Snellen Chart (practiced by only thirty-two percent of schools); test hearing with an audiometer (practiced by only eighteen percent of schools); examine the mouth with a light and tongue blade; teach a client to do a self-examination of her breasts.

3. Assist with Self-Care Management of Medications: discuss problems about undesirable drug combinations with the physician.

4. Assist with Self-Care Management of Diet: estimate the daily calories eaten and deficiency or excess of calories.

5. Assist with Self-Care Management of Exercise: estimate the degrees of flexion and extension of the major joints; test bilateral muscle strength to assess for unilateral muscle weakness; and with physician approval, teach appropriate exercises to a client, to improve range of motion and muscle strength.

These areas that are practiced in fewer schools are not unexpected. Quality of solitude and social interactions and normalcy of self-concept are both Orem terminology, that may not be used in many schools. Probably, the concepts are practiced but are described differently. As with the staff nurses, spiritual satisfaction is a sensitive subject in predominantly public nursing schools. Schools may have begun teaching some elements of physical assessment more recently and these elements may not yet be taught in all schools. The testing of vision and hearing are unique to ambulatory care settings, and since the California vocational nursing schools are using ambulatory care facilities to such a limited extent, the low percentage of practice of these elements would be expected.

As with the staff nurses, it is surprising that only sixty-five percent of the schools are having their students practice teaching clients to do self-examination of their breasts. The campaign of the American Cancer Society to have all women check their breasts each month has either been so effective that the schools see no need to reinforce this concept, or the schools do not see teaching breast self-examination as a nursing responsibility. The care of breasts and other genital areas are sensitive topics that may still be avoided by some vocational nursing schools.

Discussing elements of care collaboratively with a physician is also a more recent learning experience for many nursing students. Some vocational nursing schools may still consider this element beyond the responsibilities of vocational nurses. Vocational nursing schools are more frequently requiring their students to practice self-care management of diet than did the ambulatory care staff nurses. However, some schools may still consider one area, estimating daily calories eaten and the deficiency or excess of calories to be the prerogative of the dietitian or the registered nurse.

The area of self-care management of exercise has not been an important aspect of the medical model of nursing care that emphasizes cure of disease. Most schools do teach the importance of exercise in prevention of illness and maintenance of wellness. However, like the staff nurses, the teachers in the schools may not have been taught effective ways of approaching and teaching this subject to clients so they may not have integrated specific elements related to exercise into their curricula.

Evaluation of the Clinical Experience

The initial evaluation. The answer to Tyler's (1949:1) first fundamental curriculum development question, "What educational purposes should the vocational nursing program seek to attain?" is found in the philosophy of the Vocational Nursing Program. The Philosophy (Appendix H, page 277) states, "The major objective of the Long Beach City College Vocational Nursing Program is to prepare students for licensure and competent practice as vocational nurses. . . . Vocational nursing education is the preparation of beginning level nurses who have the knowledge and skills to care for stable clients. These clients may be adults or children who need hospital, skilled nursing or ambulatory care for acute or chronic illnesses."

The answer to Tyler's (1949:1) second question, "What educational experiences can be provided to attain these purposes?" is found in this study. The revised and updated ambulatory care experience prepares vocational nursing students to care for adults who need ambulatory care for acute or chronic illnesses. The structure and content of this experience have been thoroughly researched and validated, and the course has been implemented at LBCC.

The answer to Tyler's (1) third question, "How can these educational experiences be effectively organized?" is also found in this study. The BVNPTE has accredited both the content and the structure of the ambulatory care experience. The agencies used as clinical sites have approved the experience. The vocational nursing faculty have accepted the ambulatory care experience as an integral part of the curriculum, and the students in the vocational nursing program have evaluated it as a useful learning experience.

The answer to Tyler's (1) fourth question, "How can the faculty determine whether these purposes are being attained?" lies in the ongoing evaluation of the students who are experiencing the course. A comprehensive evaluation program has been devised for this purpose. The clinical instructor will see the students each week and will record their accomplishment of the learning experiences. She will talk with the staff nurses and the supervisors of each agency to determine their assessment of the students' progress.

The ongoing evaluation. A final examination will be used to evaluate the students' knowledge, ability to think critically, correctly apply theory to practice, and satisfactorily demonstrate psycho-motor nursing skills. The use of this tripartite examination will begin after this study is completed.

Summary. At the end of each semester, the clinical instructor conducts a post-experience evaluation with the supervisors of each of the clinical facilities. She brings information from these meetings to the teaching team at a course final evaluation meeting. The classroom instructor gives the final examination and tabulates the results of the examination. The classroom instructor also collects written course evaluations from the students. These evaluations include information about the ambulatory care experience. The classroom instructor tabulates information from the student evaluations and brings it, along with the final examination statistics, to the teaching team at the course final evaluation meeting. Using these objective and subjective inputs, the teaching team leader makes recommendations to the faculty for further necessary changes and updates. The faculty will consider these recommendations in relation to the whole vocational nursing curriculum, input from the clinical agencies, suggestions from the vocational nursing advisory committee, and direction from the college administration. This process will facilitate needed adjustments, so that the ambulatory care experience can continue to be as meaningful a learning opportunity as possible.

Chapter 5

DISCUSSION, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Discussion of Results

During this study, four questions were investigated. The questions, each followed by a resolution, are presented below.

The Need for an Ambulatory Care Clinical Experience

Question One. What circumstances suggest a need for an ambulatory care clinical experience?

The answer to this question was culled from the literature, a survey of the LBCC VN Advisory Committee, interviews with three directors of ambulatory care agencies, and an interview with the executive officer of the Board of Vocational Nursing. All of these sources agreed on several answers to the question. The high cost of hospital care has forced clients to be discharged earlier from hospitals so they seek continuing care in ambulatory facilities. Preventive care delivered in ambulatory facilities is slowly increasing because it also saves money. Chronic illness, seen in the aging population, is swelling the need for ambulatory care. These facts support the predictions that ambulatory care will continue to grow and there will be an increasing need for nurses to work in ambulatory care facilities.

A Supportive Program Structure

Question Two. Is the Long Beach City College vocational nursing program structured so that it will support the ambulatory care experience?

At the beginning of this study, the LBCC VN program structure did not adequately support the ambulatory care experience. The literature review, the interviews, and the surveys that were conducted as a part of this study have directed and then validated changes made by the VN faculty. To support the ambulatory care experience, the faculty updated the program philosophy so that it included ambulatory care facilities, as well as hospitals and skilled nursing care facilities, as sites in which students would be prepared to work. Skill in using the language of nursing, nursing diagnosis, was added as part of the requisite basic nursing theory. This addition was necessary so that the students can effectively collaborate with staff nurses without the support of an on-site instructor to identify and name nursing problems and develop and implement plans of care. The faculty also revised the taxonomy of nursing diagnoses that provides the content outline for the curriculum. The structure of the taxonomy was changed from a systems-based medical model, to Orem's Self-Care Deficit Theory of Nursing (SCDTN).

Integration of Theory, Process and Content

Question Three. How shall a nursing theory, nursing diagnosis and critical thinking, and wellness and prevention of illness be integrated into the ambulatory care clinical experience?

The resolution of problems implicit in this question was the major accomplishment in this study. Each of the three factors required a somewhat different solution.

Orem's theory. The faculty had already adopted Orem's theory of nursing and was using it as the theoretical foundation for most of the curriculum. However, in some ways, the theory was being used in name only. The literature was searched to find guidance in how to more effectively use a nursing theory as a basis for the curriculum. Many authors suggested that nursing theories are appropriate and necessary, but not many were able to give concrete direction for using a theory. Bevis (1989), however, clearly answers this question when she says that a nursing theory provides strategies for organizing the curriculum. The faculty used this information as they reorganized the VN Taxonomy of Nursing Diagnoses. Deloughery (1991) also gave concrete direction when she said that a theory defines the nurse's role and directs his/her use of the nursing process.

The literature was also reviewed to reinforce the researcher's knowledge base about Orem's theory. Orem originally developed her theory in 1958 as part of a government sponsored project to upgrade practical nursing. She proposed that a person will meet his/her own self-care needs if s/he can. If the person is ill or injured, s/he has self-care deficits, and may need nursing care, in order to return to a self-care state. Orem's theoretical statement becomes very complex and abstract when all the possible ramifications and levels of care are explained, especially when Orem's own terminology is used. However, after reviewing Orem's books and many articles, reviews, and criticisms of Orem's work by other authors, the researcher became convinced that there are no unfathomable secret meanings hidden in all the obtuse terminology. Without fear of contradiction, the faculty working within Orem's Self-Care Deficit Theory of Nursing can teach students that the purpose of nursing is to return clients to a state of self-care.

When the knowledge-base hurdle was overcome, it became a relatively simple matter to reorganize the ambulatory care learning tools. The learning tools are six forms used by the students to gather information from a client, and then assist the client to resolve the health problem and return to a self-care state. These forms were reorganized to change them from the medical model, with its pathophysiological head-to-toe pattern, to a more holistic approach using Orem's universal self-care deficits. The arrangement and classification of the content was completely revised so that it is categorized under Orem's universal self-care deficits. The titles of the learning tools were also changed to reflect the change in theoretical orientation. The content of these forms required only minor adjustments. One of these changes is a substitution of the term "reason for contact" for "chief complaint." This change in terminology reflects the assumption that the client is coming to the health care provider, not as a dependent "complainer" but as a collaborator in achieving self-care.

The behavioral objectives provide the students with directions for using the six ambulatory care learning tools. The behavioral objectives were rewritten for clarification but the content was not radically changed. Once the revision of the learning tools was completed, the evaluation form was easily reconstructed so that the students could record, and the teacher could confirm, their accomplishment of the behavioral objectives.

Haynes, Executive Officer of the BVNPTE commented on nursing theories for vocational nursing programs in a telephone interview on February 25, 1992. She said that although about half of the vocational nursing schools still use the medical model to direct their nursing curriculum; this will change over the next ten years so that schools will be using nursing theoretical models.

Nursing diagnosis and critical thinking. The review of the literature and interviews with the executive officer and nursing consultant of the Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE) were the sources for information to resolve the problem of nursing diagnosis and critical thinking.

All five steps of the nursing process are inherent in the six ambulatory care learning tools. To complete a learning tool, the student gathers subjective and objective data about a client's self-care problem, analyzes the data and names the problem using nursing diagnostic terminology, creates a plan for resolution of the problem, carries out the plan, and evaluates both the plan and the client's self-care status. In the ambulatory care setting at LBCC, the student gives nursing care under the guidance of staff nurses but without the direct daily supervision of an instructor. Therefore, the student must be able to complete the required work independently, and then, before implementing the plan with a client, request a signature approval from the supervising registered nurse. It is impossible for the student to complete the ambulatory care assignments without doing all five steps of the nursing process.

Under the California Education Code (Title V, § 55002), associate degree classes in community colleges must require critical thinking (analysis) as part of the coursework. The six learning tools ensure that students will do critical thinking during the ambulatory care experience. Bloom and his colleagues (1956) state that analysis and synthesis are a part of the broad classification of intellectual abilities and skills that should be taught and practiced during elementary school, through college.

However, the National Council of State Boards of Nursing, an influential organization that is responsible for the content of nursing licensing examinations has determined that a vocational nurse cannot (or should not) make nursing diagnoses. In the state board test plan for vocational nurses, the National Council explains that the examination is based on four steps of the nursing process. "The phases of the nursing process are grouped under the broad categories of collecting data [assessment], planning, implementing, and evaluating nursing care" (NCSBN, 1989:3). The test plan also states, "the examination includes test items at [only] the cognitive levels of knowledge, comprehension, and application" (2). Since the cognitive levels of analysis, synthesis, and evaluation are not tested, the practice of vocational nurses is effectively limited because many schools do not teach beyond the parameters of the state board test.

Haynes, the Executive Officer for the California BVNPTE, echoes the National Council stance in a telephone interview on June 2, 1992. She states that the Board considers analysis and synthesis to be beyond the scope of practice for California vocational nurses. She also says that the National Council's determination that analysis and synthesis and thus making nursing diagnoses is the exclusive prerogative of the registered nurse, constrains the BVNPTE in its interpretation of vocational nursing's scope of practice.

The vocational nursing faculty reviewed all sides of this thorny problem and confirmed that the students in the LBCC vocational nursing program will continue to learn all five steps of the nursing process. To guarantee that the students understand that they must practice under the supervision of a registered nurse, each ambulatory care learning tool now includes a sentence requiring the students to obtain a registered nurse's signature of approval, before they can implement the plan with a client.

Wellness and the prevention of illness. The review of the literature and interviews with the executive officer of the BVNPTE, three ambulatory care administrators, and a student survey are the sources for the solution of this problem. There was no controversy about using wellness and prevention of illness as a major content focus for the ambulatory care experience. Every source confirmed that the solution to a major part of the nation's health problems should be keeping people well, rather than curing them after they become sick. The responses of the executive officer of the BVNPTE and three ambulatory administrators, who agree that vocational nursing students should be learning to promote wellness, prevent illness, and teach self-care measures, supports and gives validity to the inclusion of this subject matter in the learning tools.

The major emphasis in the first three learning tools is honing the student's assessment skills. The other three learning tools focus on wellness, prevention of illness, and preventing the complications of illness. The student survey confirmed that the students had enough time to work with clients for wellness and illness prevention. The survey also indicated that in the students' opinion the learning tools were effective in accomplishing this goal. However, a problem does loom for the students when they become graduates. Doctors or medical organizations, who will frequently be their employers, are far more interested in curing diseases, than in keeping clients well. Resolving this problem will be one of the major tasks of the federal and state governments who are charged with implementing "health care reform."

Evaluation

Question Four. How shall the ambulatory care clinical experience be evaluated?

The review of the literature, surveys of students who had completed an ambulatory care experience, staff nurses who worked in ambulatory care, LBCC faculty members, and California vocational nursing program directors provided information used to evaluate the ambulatory care experience.

Evaluation of the ambulatory care experience at LBCC. The work of Tyler (1949) provided the framework for the immediate evaluation of the ambulatory care experience. Other authors contributed ideas related to paper-pencil testing of clinical knowledge, suggestions for outcome evaluation of student achievement in an ambulatory care experience, and offered survey instruments that could be modified for use in evaluating the ambulatory care experience.

The ongoing evaluation of the LBCC ambulatory care experience occurs at the beginning and at the end of each semester. At a planning session with each agency, the clinical instructor and agency supervisors adjust the parameters for the upcoming experience, based on the experiences of the previous semester. After the clinical experience the clinical instructor brings information from an evaluation with agency supervisors, to the teaching team at a course final evaluation meeting. The classroom instructor brings the results of the final examination and the students' evaluations of the clinical experience. Using these objective and subjective inputs, the teaching team leader makes recommendations to the faculty. The faculty considers these recommendations in relation to the whole vocational nursing curriculum, suggestions from the vocational nursing advisory committee, and direction from the college administration. The faculty then facilitates needed adjustments, so that the ambulatory care experience can continue to be a meaningful learning opportunity for the students.

Evaluation of the concept of an ambulatory care experience. Haynes (2/25/92), Executive Officer of the BVNPTE, feels that schools and the Board should work collaboratively to make adjustments to changes in delivery of health care such as the shift to ambulatory care. She encourages schools to explore using ambulatory care facilities as educational sites. Anderson (3/31/92), nursing consultant for the BVNPTE, agrees that it would be appropriate for other schools to consider establishing an ambulatory care experience. She concurs that other schools should consider using community health agencies as clinical learning sites, even though they could only provide instructor support on a weekly basis. She feels that it would be appropriate for other schools to consider requesting an increase in their hours of ambulatory care experience if they have an appropriate structure for the experience and have acceptable clinical sites.

All three of the ambulatory care administrators said the balance of theory work and practice, the number of assignments, the time to do the assignments, and the depth of the assignments was appropriate. These comments and conclusions generally supported and verified the appropriateness of the ambulatory care learning experience.

The students who had completed the revised ambulatory care learning experience evaluated their own completion ratio for the learning tools, their ability to complete the learning tools expeditiously, and their ability to remember the content of the learning tools. The students also judged the relationship of the learning tools to Orem's theory, the utility value of the learning tools in providing information about clients, and the number of clients for whom time would be available for health teaching. The students judged all the learning tools to be useful and efficient in accomplishing the objectives for which they were designed.

The sixteen members of the LBCC faculty assessed the criteria that had been written for establishing an ambulatory care experience. An average of more than ninety percent of the faculty judged the criteria related to students, agency, and instructors, as "essential." They considered eighty-two percent of the criteria for the behavioral objectives to be "essential." Anderson, the BVNPTE consultant, considered about seventy percent of the criteria to be "essential," almost twenty percent to be "supplementary," and a little over ten percent to be "unnecessary." The difference between the faculty and the consultant reflects the difference in orientation between a regulatory agency that sets minimum standards and a school faculty, that establishes standards of excellence. In either case, the criteria were generally evaluated with approval.

The sixteen members of the LBCC faculty judged the forty-three elements of the six learning tools and a client teaching component. Ninety percent of the components of the quick baseline assessment, client teaching, self-care history, and self-care management of medications were judged to be "essential." Eighty percent of the elements of the nursing physical assessment and self-care management of diet were ranked as "essential." However, only sixty-six percent of the elements for self-care assessment of exercise were considered "essential" (see Table 8 on page 160). This may reflect the notion that exercise guidance is not the province of a vocational nurse, even though all wellness programs consider exercise to be a keystone of healthy living.

Anderson, nursing consultant, evaluated the same forty-three ambulatory care skills. She judged twenty-eight skills as "essential." She considered nine to be "supplementary" and six to be "unnecessary" (see Table 8 on page 160). She based her judgment on the skills that need to be taught to meet accreditation requirements and on the NCLEX guidelines that suggest that it is beyond the scope of practice for vocational nurses to be required to do thinking at the analysis and synthesis levels.

One hundred and thirteen ambulatory care staff nurses stated whether they had practiced the elements of the learning tools, while they were in school. Out of forty-three elements, twenty-seven had been practiced by more than 80 percent of the nurses. All elements had been practiced by at least sixty percent of the nurses (Table 8 page 160).

More than 80 percent of students in California VN programs are practicing thirty-one of the forty-three elements. Only two elements, hearing and distance vision assessment, are being practiced by less than 50 percent of programs (Table 8 page 160).

An average of 95 percent of California VN schools teach students the listed ambulatory care skills. A few California schools reported that they do not teach their students to make some of the ambulatory care assessments (Table 12 page 183). This is significant since the "The NCLEX-PN Test Plan" (NCSBN, 1989:3) explains, "The entry-level practical nurse acts . . . in a more independent role when participating in the data collecting [assessment] and implementing phases of the nursing process."

An average of 87 percent of ambulatory care staff nurses have practiced the ambulatory care skills. Practice of the ambulatory care skills is provided by 89 percent of California VN schools (Table 13 page 183).

An average of 19 percent of staff nurses practiced ambulatory care skills only in ambulatory care settings while they were in school. This is contrasted with the California VN Directors that reported only 1 percent of schools with students practicing skills only in ambulatory care facilities. Practice of ambulatory care skills in hospitals was additionally provided for 38 percent of staff nurses and 64 percent of California VN schools. Practice of the skills in both hospitals and ambulatory care facilities was provided for 30 percent of staff and 24 percent of schools (Table 13 page 183).

Conclusions and Implications

The data collected during this Major Applied Research Project have been applied to the revision of an ambulatory care experience that can serve as a model for other vocational nursing schools. A growing need for students to be educated in ambulatory care nursing has been established. The vocational nursing program structure has been modified so it now appropriately supports the clinical experience. Both the BVNPTE nursing consultant and the LBCC VN nursing faculty have approved the criteria for setting up an ambulatory care experience.

A nursing theory, Orem's Self-Care Deficit Theory of Nursing, has been appropriately integrated into the components that direct student learning, during the ambulatory care clinical experience. Student learning, without the direct supervision of an instructor is achievable, because the students are given clear directions in the revised learning tools. The students can practice using the nursing process, including nursing diagnosis, during their ambulatory care experience. The learning tools are designed to promote wellness and illness prevention, and these areas will be of increasing importance in managing the health of our nation.

A very high percentage of the individual elements of the learning tools were ranked as "essential" by the BVNPTE consultant and the LBCC VN faculty. These elements had been learned and practiced by a high percentage of ambulatory care nurses during their student experience, and the elements are also being taught and practiced by a majority of California vocational nursing programs. Students are able to learn to perform ambulatory care skills in both hospital settings and in ambulatory care settings. However, the staff nurses who are presently working in ambulatory care tended to learn more ambulatory skills in an ambulatory care setting.

From the extensive positive evaluations of the ambulatory care experience, the following implications may be assumed. With careful planning and an appropriate curriculum, ambulatory care facilities can provide successful student learning experiences, even when it is not possible to have a full-time teacher on site. If appropriate behavioral objectives, well designed learning tools, and weekly monitoring by an instructor are provided, beginning level undergraduate students can successfully implement their own learning experiences. The learning experiences in ambulatory care facilities will prepare students to give a futuristic kind of nursing care that will bring the concepts of wellness and illness prevention, rather than the cure of illness, to a much broader segment of our nation's population.

Recommendations for Implementation, Dissemination, and the Improvement of Practice

In this study the current status of ambulatory health care in the United States was investigated, and data was obtained upon which an ambulatory care clinical experience was revised and evaluated. Based on the results of this study, the following recommendations are made for schools of nursing:

1. Make curricular changes so that students can have specific preparation for working in ambulatory care.
2. In communities without ambulatory care facilities establish an affiliation with an ambulatory care agency in another community. This study shows that ambulatory care is growing, and that ambulatory care is one of the places that nurses can find jobs. The study also demonstrated that students can have beneficial ambulatory care learning experiences, even without daily direct instructor supervision.
3. For students who will have an ambulatory care clinical experience, provide
    a. Clear directions for implementing the clinical behavioral objectives
    b. Detailed learning tools so students can manage their own learning experiences
    c. Definitive ways of evaluating students' accomplishment of the behavioral objectives.

    Ambulatory clinical facilities are typically small and can accommodate only a few students in each site, so an on-site teacher is not feasible. These components are necessary in order to give adequate guidance for students. The results of this study provide a model for teaching nursing care in ambulatory care facilities that will facilitate the use of these clinical agencies by nursing programs.
4. Do an extraordinary amount of pre-planning with new ambulatory care clinical agencies. This pre-planning must include written directions that are made available to both students and agency personnel. The directions should delineate the responsibilities of students

for other areas of nursing care, such as medication administration and treatments, and the responsibilities of staff nurses for supervision of student nurses' activities.

5. Require that students complete courses in nursing fundamentals and be well along toward completing medical-surgical nursing experiences before beginning an ambulatory care experience.

   Most of the nursing skills required in an ambulatory care experience are not technically demanding, but students must be comfortable with basic nursing skills. In addition, students in an ambulatory care experience must also be psychologically ready to assume responsibility for their own learning. Advanced interpersonal and assessment skills, that require much more learning time and experience, should be reserved for students in nurse practitioner programs at the bachelor's or master's degree level.

6. Plan for the following time parameters in an ambulatory care experience:
   a. Not less than fifty-four hours, nor more than 108 hours
   b. Full eight-hour shifts with sequences of at least two or three days
   c. An initial time period for the students to orient to the facility and establish relationships with staff members.

   Basic nursing programs must use the students' clinical time very efficiently, to provide an opportunity for all the needed learning experiences.

7. Adopt a nursing theory rather than continuing to use the medical model.

   Nursing and medicine have very different foci and using the medical model to direct learning about nursing may cause students to be confused about their role as a nurse.

8. Teach the subjects listed below:
   a. Assessment of spiritual satisfaction
   b. All the elements of a physical assessment, including distance vision testing with a Snellen eye chart (E chart) and hearing screening with an audiometer

c. Teaching breast self-examination

d. How to collaboratively discuss client care with a physician

e. Teaching self-care management of medications

f. Teaching self-care management of diet including basic food group requirements and how to estimate calories

g. Teaching self-care management of exercise including assessment of limitation of joint movement, bilateral muscle strength, and sensation in the extremities.

Some of the staff nurses surveyed in the study had not learned several elements of the ambulatory care learning tools during their basic programs. Also, the directors of some California vocational nursing schools indicated that they are not currently teaching these elements.

9. Use the more modern five step nursing process that includes nursing diagnosis.

Students who have been taught the four step nursing process will be handicapped in continuing with their education because they have learned an obsolete version of the nursing process. Although many staff nurses are not well prepared to be role models as nursing diagnosticians, students and staff, (or faculty) can learn together to use some of the newer aspects of nursing practice.

The following recommendation applies to the National Council of State Boards of Nursing (NCSBN):

10. Discard the premise that the intellectual skills of analysis and synthesis are beyond the scope of practice for vocational nurses.

Either the premise is based on a mistaken interpretation of The Taxonomy of Educational Objectives (Bloom et al., 1956), or it deliberately discriminates against vocational nurses.

The following recommendation is addressed to The Practical Nursing Council of the National League for Nursing:

11. Suggest that the National Council of State Boards of Nursing use the stable or unstable nature of the clients for whom care is being provided, as a better way to differentiate between the levels of practice.

The following recommendations are directed to the Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE) and its officers:

12. Read this study (a copy has been requested and will be provided).
13. Abandon the premise that analysis and synthesis are beyond the scope of practice of California's vocational nurses.

    Since grade school children are expected to learn to use the intellectual skills of analysis and synthesis, it is unreasonable to arbitrarily limit adult learners from the use of analysis and synthesis.

The last recommendation is addressed to the author of this study:

14. Submit an article describing the model for teaching ambulatory care nursing to the Journal of Practical Nursing or a similar journal, so that the model can be used by other nursing programs who wish to use ambulatory care facilities as clinical sites for student nurses.

BIBLIOGRAPHY

Abbott, S. Darlene, Ron Carswell, Marion McGuire, and Maureen Best. "Self-Evaluation and Its Relationship to Clinical Evaluation." Journal of Nursing Education, 27:219-224. May, 1988.

Alfaro, Rosalinda. Applying Nursing Diagnosis and Nursing Process: A Step-by-Step Guide. 2nd ed. Philadelphia: J. B. Lippincott Company, 1990.

Alford, Dolores M. "Self-Care Practices in Ambulatory Nursing Clinics for Older Adults." In The Science and Art of Self-Care. Ed. Joan Riehl-Siska. Norwalk, CT: Appleton-Century-Crofts, 1985.

Allen, Carol J. "Incorporating a Wellness Perspective for Nursing Diagnosis in Practice." Classification of Nursing Diagnosis: Proceedings of the Eighth Conference. Ed. Rose Mary Carroll-Johnson. Philadelphia: J. B. Lippincott Company, 1990.

American Hospital Association. Hospital Statistics. Chicago, 1989.

American Hospital Association. Hospital Statistics. Chicago, 1990.

American Hospital Association. Hospital Statistics. Chicago, 1991.

American Nurses' Association. Nursing's Agenda for Health Care Reform. Kansas City, MO, 1991.

"American Nurses' Association's First Position on: Education for Nursing." American Journal of Nursing, 65:106-11. December, 1965.

American Public Health Association. Summary of Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, D.C.: n. d.

"ANA Conventioners to Seek Keys to the Healthcare Future." American Journal of Nursing, 92:100. May, 1992.

"ANA Delegates Vote to Limit RN Title to BSN Grad; 'Associate Nurse' Wins Vote for Technical Title." American Journal of Nursing, 85:1016, 1017, 1020, 1024. September, 1985.

"ANA Members Say No to Mandatory AIDS Testing, Vote to Require BSN for Certification by 1998." American Journal of Nursing, 91:68-69. August, 1991.

Anderson, Cheryl. Telephone interview. April 3, 1992.

Anderson, David. "Opportunity Knocks at Last." RN, 52:52-63. October, 1989.

Andrastek, Barbara. Personal Interview. April 10, 1990.

Arnett, Penelope P. How to...Categorize Questions According to the "New" NCLEX-PN Test Plan. North Augusta, SC: Arnett Development Corporation, 1990.

Aspinall, Mary Jo and Christine A. Tanner. Decision Making for Patient Care: Applying the Nursing Process. New York: Appleton-Century-Crofts, 1981.

Ballman, Catherine. "California, a State of Mind." American Journal of Nursing, 85:181-84. February, 1985.

Barnes, Lila. Personal Interview. April 17, 1990.

Bates Barbara. "Nursing in a Health Maintenance Organization." In Contemporary Community Nursing. Ed. Barbara Walton Spradley. Boston: Little, Brown and Company, 1975.

Benner, Patricia. "From Novice to Expert." American Journal of Nursing, 85:402-407. March, 1982.

Berger, Marie. "Clinical Thinking Ability and Nursing Students." Journal of Nursing Education, 23:306-08. September, 1984.

Berner, Eta S. and Kenneth J. Bender. "Determining How to Begin." In Evaluating Clinical Competence in the Health Professions, by Margaret K. Morgan and David M. Irby. St. Louis: The C. V. Mosby Company, 1978, 3-10.

Better Documentation. Clinical SKILLBUILDERS. Springhouse, PA: Springhouse Corporation, 1992.

Bevis, Em Olivia. Curriculum Revolution: Mandate for Change. New York: National League for Nursing, 1987.

Bevis, Em Olivia. Curriculum Building in Nursing: A Process. 3rd ed. New York: National League for Nursing, 1989.

Bloom, Benjamin S., Max D. Engelhart, Edward J. Furst, Walker H. Hill, and David R. Krathwohl. Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook 1: Cognitive Domain. New York: David McKay Company, Inc., 1956.

Board of Vocational Nurse and Psychiatric Technician Examiners. Policy: "3.3 Community Health Agencies." Photocopy. N. d.

Board of Vocational Nurse and Psychiatric Technician Examiners. Policy: "Skills Expected to Be Taught in Vocational Nursing Programs." Photocopy. 10/1974, Rev. 1/1984.

Board of Vocational Nurse and Psychiatric Technician Examiners. Vocational Nursing Practice Act with Rules and Regulations. Sacramento: California Office of State Printing, 1987.

Boehm, Barrett L., and Susan M. Murray. "Healthcare's Future Found in Outpatient Alternatives." Modern Healthcare, 20:24. February 26, 1990.

Borecky, Joan. Evaluation of Health Occupations Programs. Santa Rosa, CA: Santa Rosa Junior College, 1991.

Brady, Linda H., and Anton J. Netusil. "A National Study of Nursing Education's Use of a Model of Program Evaluation." Journal of Nursing Education, 27:225-26. May, 1988.

Brunner, Lillian Sholtis, and Doris Smith Suddarth. Textbook of Medical-Surgical Nursing. Philadelphia: J. B. Lippincott Company, 1988.

Bulechek, Gloria M., and Joanne C. McCloskey. "Nursing Interventions: Treatments for Potential Nursing Diagnoses." In Classification of Nursing Diagnosis: Proceedings of the Eighth Conference. Ed. Rose Mary Carroll-Johnson. Philadelphia: J. B. Lippincott Company, 1990.

Bush, Jennifer J. "Senior Wellness Demands Priority, Says RN." NURSEWEEK, June 10, 1991, 1, 19.

"Bush Offers Up Health-Care Reform Proposal." RN, 55:13. April, 1992.

"Business Bulletin." Wall Street Journal. September 20, 1984, Western E

California. Education Code. 1992

Callahan, Mary. Personal communication. July, 1991.

Carnevali, Doris L., Pamela H. Mitchell, Nancy F. Woods, and Christine A. Tanner. Diagnostic Reasoning in Nursing. Philadelphia: J. B. Lippincott Company, 1984.

Carpenito, Lynda Juall. Nursing Diagnosis: Application to Clinical Practice. 4th ed. Philadelphia: J. B. Lippincott Company, 1992.

Carroll-Johnson, Rose Mary. " Editorial: Reflections on the Ninth Biennial Conference." Nursing Diagnosis, 1:49-50. April/June, 1990.

Chance, Paul. "Master of Mastery." Psychology Today, April 1987, 42-46.

"The Changing Universe of Nursing." Nursing86, 16:48-49. January, 1986.

Chinn, Peggy L. "Looking into the Crystal Ball: Positioning Ourselves for the Year 2000." Nursing Outlook, 39:251-56. November/December, 1991.

Christensen, Paula J., and Janet W. Kenney, Eds. Nursing Process: Application of Conceptual Models. 3rd ed. St Louis: The C. V. Mosby Company, 1990.

Colorado Council on Nursing Education and the Colorado Trust. Colorado Nursing Articulation Model. Denver, 1990.

"Community Nursing Centers Gaining Ground as Solution to Health Issues." American Journal of Nursing, 92:70. July, 1992.

Council of Practical Nursing Programs. Characteristics of Practical Nursing Education. Revised ed. New York: National League for Nursing, 1985.

Council of Practical Nursing Programs. Entry-Level Competencies of Graduates of Educational Programs in Practical Nursing. New York: National League for Nursing, 1989.

Curran, Connie R., Ann Minnick, and Joan Moss. "Who Needs Nurses?" American Journal of Nursing, 87:444-447. April, 1987.

Daria, Joan, and Sally Moran. "Nursing in the 90s." Nursing85, 48:26-29. December, 1985.

"Delegates Remodel ANA as a 'Lean Machine' with More Staff Nurses in the Drivers Seat." American Journal of Nursing, 89:1228. September, 1989.

Deloughery, Grace L. Issues and Trends in Nursing. St. Louis: Mosby Year Book, 1991.

de Tornyay, Rheba, and Martha A. Thompson. Strategies for Teaching Nursing. 3rd ed. New York: John Wiley & Sons, 1987.

de Tornyay, Rheba. "An Agenda for Action." Journal of Nursing Education, 30:4. January, 1991.

Diekelmann, Nancy. "Curriculum Revolution: A Theoretical and Philosophical Mandate for Change." In Curriculum Revolution: Mandate for Change. New York: National League for Nursing, 1988.

Drew, Judith C. "Health Maintenance Organizations: History, Evolution, and Survival." Nursing & Health Care, 11:145-49. March, 1990.

Dolan, Marion B. "Why Nurses Should Make "MEDICAL" Diagnoses." Nursing86, 16:50-51. February, 1986.

Duespohl, T. Audean. Nursing Diagnosis Manual for the Well and Ill Client. Philadelphia: W. B. Saunders Company, 1986.

Eliopoulos, Charlotte. Gerontological Nursing. 2nd ed. Philadelphia: J. B. Lippincott Company, 1987.

Eliopoulos, Charlotte. Health Assessment of the Older Adult. 2nd ed. Redwood City, CA: Addison-Wesley Nursing, 1990.

Ellis, Janice Rider, and Celia Love Hartley. Nursing in Today's World: Challenges, Issues, and Trends. 4th ed. Philadelphia: J. B. Lippincott Company, 1992.

Engel, George L. "The Need for a New Medical Model: A Challenge for Biomedicine." Science, 196:129-136. April, 1977.

Erwin, T. Dary. Assessing Student Learning and Development: A Guide to the Principles, Goals, and Methods of Determining College Outcomes. San Francisco: Jossey-Bass Publishers, 1991.

Evans, Caswell A. Jr. "Los Angeles County's Approach to the Year 2000 Health Objectives." Paper delivered at the Southern California Public Health Association. Los Angeles, December 6, 1991.

Fagin, Claire M. "President's Message." Nursing & Health Care. 13:316-17. June, 1992.

Federa, R. Danielle. "HMO's: Competitive Threat or Strategic Opportunity?" The Journal of Ambulatory Care Management. 6:64-83. February, 1983.

Fehring, Richard J., and Marilyn Frenn. "Nursing Diagnosis in a Nurse-Managed Wellness Resource Center." In Classification of Nursing Diagnosis: Proceedings of the Sixth Conference. Ed. Mary E. Hurley. St. Louis, MO: The C. V. Mosby Company, 1986.

Field, Diana. "Reports on Exceptional Presentations at NANDA: 'Inclusivity' for Nursing Diagnosis." SCANDA 10:4-5. Summer, 1992.

Fink, Arlene, and Jacqueline Kosecoff. How to Conduct Surveys: A Step by Step Method. Beverly Hills: Sage Publications, 1985.

Flynn, Janet-Beth McCann, and Phyllis Burroughs Heffron. Nursing: From Concept to Practice. 2nd ed. Norwalk, CT: Appleton & Lange, 1988.

Fowler, Floyd J., Jr. Survey Research Methods. Beverly Hills: Sage Publications, 1984.

Frank-Stromborg, Marilyn. Instruments for Clinical Nursing Research. Norwalk, CT: Appleton & Lange, 1988.

Fawcett, Jacqueline. Analysis and Evaluation of Conceptual Models of Nursing. Philadelphia: F. A. Davis Company, 1984.

Gallego, Susan. Personal Interview. February, 1989.

Gagné, Robert M,. and Leslie J. Briggs. Principles of Instructional Design. New York: Holt, Rinehart and Winston, 1974.

Geffers, Elizabeth, Barbara Andrastek, Laura Santana, Joyce Gillette, Kelley Simoneau, and Joyce Hutton. Past, Present, and Future: Ambulatory Nursing. Photocopy. N. p.: FHP, Inc. Regional Ambulatory Nursing, 1990.

Glock, Nancy Clover. "'College Level' and 'Critical Thinking': Public Policy and Educational Reform." Photocopy. Chancellor's Office of California Community Colleges, Sacramento, CA, 1987.

Glock, Nancy Clover. Telephone Interview. July 9, 1992.

Gordon, Marjorie. Nursing Diagnosis: Process and Application. New York: McGraw-Hill Book Company, 1982.

Gould, Julia E,. and Em Olivia Bevis. "Here There Be Dragons: Departing the Behaviorist Paradigm for State Board Regulation." Nursing & Health Care, 13:126-133. March, 1992.

Gray, Barbara. "Nursing Centers Gaining Ground." NURSEWEEK, 5:1, 4. June l, 1992.

Gray, Barbara Bronson. "Bringing the Agenda Home." California Nursing. 13:12-16. November/December 1991.

Gregory, Faye M. "Developing a Survey Instrument to Determine the Learning Opportunities for Student Nurses in Ambulatory Care Facilities." Practicum, Nova University, 1990.

Gregory, Faye M. "Development of a Skills Testing Manual for Evaluating Ambulatory Care Nursing Skills." Practicum, Nova University, 1991.

Griffith, Hurdis. "Who Will Become the Preferred Providers?" American Journal of Nursing, 85:538-42. May, 1985.

Grippando, Gloria M,. and Paula R. Mitchell. Nursing Perspectives & Issues. 4th ed. Albany, NY: Delmar Publishers, Inc., 1989.

Groah, Linda, and Diane Howery. "25 Predictions for Perioperative Nursing." Nursing92, 22:48-49. January, 1992.

Gross, Yukie T., Evelyn S. Takazawa, and Charles L. Rose. "Critical Thinking and Nursing Education." Journal of Nursing Education, 26:317-23. October, 1987.

Hall, Joanne E,. and Barbara Redding Weaver. Distributive Nursing Practice: A Systems Approach. 2nd ed. Philadelphia: J. B. Lippincott Company, 1985.

Hamilton, Persis Mary. Realities of Contemporary Nursing. Menlo Park, CA: Addison-Wesley Nursing, 1992.

Hammers, Maryann. "Class of '92 Faces Tough Job Market." NURSEWEEK, 5:1, 11. June 15, 1992.

Hanchett, Effie S. Nursing Frameworks and Community as Client: Bridging the Gap. Norwalk, CT: Appleton & Lange, 1988.

Harrington, Linda W. "The diagnosis Dilemma: One Preferred Remedy." Nursing and Health Care, 9:93-95. February, 1988.

Hart, Sylvia E,. and Carolyn F. Waltz. Educational Outcomes: Assessment of Quality—State of the Art and Future Directions. New York: National League for Nursing, 1988.

Hartweg, Donna L. Dorothea Orem: Self-Care Deficit Theory. Eds. Chris Metzger McQuiston and Adele A. Webb. Notes on Nursing Theories, vol. 4. Newbury Park, CT: Sage Publications, 1991.

Hastings, Clare E. "Classification Issues in Ambulatory Care Nursing." Journal of Ambulatory Care Management, 10:50-64. August, 1987a.

Hastings, Clare E. "Measuring Quality in Ambulatory Care Nursing." The Journal of Nursing Administration, 17:12-20. April, 1987b.

Hastings, Clare E., Mary Ann Moore, Kathleen Parrinello, Linda Gehring, Patricia L. Miller, Elizabeth M. Murphy, and Pamela L. Speich. Ambulatory Care Nursing Administration and Practice Standards. 2nd ed. Pitman, NJ: American Academy of Ambulatory Nursing Administration, 1987.

Hatcher, Michael T. "National Perspectives on the Year 2000 Health Objectives." Paper delivered at the Southern California Public Health Association. Los Angeles, December 6, 1991.

Hawkins, Joellen Watson. Clinical Experiences in Collegiate Nursing Education: Selection of Clinical Agencies. New York: Springer Publishing Company, 1981.

Hawkins, Joellen W., Evelyn R. Hayes, and Cynthia S. Aber. An Orientation to Hospitals and Community Agencies. New York: Springer Publishing Company, 1986.

Haynes, Billie. Telephone interview. February 25, 1992.

Haynes, Billie. Telephone interview. June 2, 1992.

"Health Care Reform: Nursing's New Agenda." Nursing91, 21:11. August, 1991.

Hill, Lyda, and Nancy Smith. Self-Care Nursing: Promotion of Health. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1985.

Hoffman, Frances, and Douglas S. Wakefield. "Ambulatory Care Patient Classification." Journal of Nursing Administration, 16:23-30. April 1986.

"Hospitals Reimbursed by Diagnosis: Not Length of Stay." Nursing News. RN, 43:16. January, 1980.

Houldin, Arlene D., Susan W. Saltstein, and Kathleen M. Ganley. Nursing Diagnoses for Wellness: Supporting Strengths. Philadelphia: J. B. Lippincott Company, 1987.

Houston, Deborah A. "Ambulatory Care: The Nurse's Challenge." Dimensions in Oncology Nursing, 4:3. Spring 1990.

Infante, Mary Sue. The Clinical Laboratory in Nursing Education. New York: John Wiley & Sons, 1985.

Iyer, Patricia W., Barbara J. Taptich, and Donna Bernocchi-Losey. Nursing Process and Nursing Diagnosis. Philadelphia: W. B. Saunders Company, 1986.

Jenny, Jean. "Classifying Nursing Diagnoses: A Self-Care Approach." Nursing & Health Care, 10:82-88. February, 1989.

Jenny, Jean. "Classifying Nursing Diagnoses: A Self-Care Approach." Classifying Nursing Diagnoses: Proceedings of the Eighth Conference. Ed. Rose Mary Carroll-Johnson. Philadelphia: J. B. Lippincott Company, 1990.

Johnson, Marion, Ed. Series on Nursing Administration. Menlo Park, CA: Addison-Wesley, 1988.

Joint Commission on Accreditation of Healthcare Organizations. "Hospital-Sponsored Ambulatory Care Services (HO)." In 1991 Accreditation Manual for Hospitals. N. p.: 1990.

Jonas, Steven. Health Care Delivery in the United States. 3rd ed. New York: Springer Publishing Company, 1986.

Joseph, Angela C. "Ambulatory Care: An Objective Assessment." The Journal of Nursing Administration, 20:27-33. February, 1990.

Kenkel, Paul J. "Managed-care Organizations on the Rebound." Modern Healthcare, 20:82-86. May 21, 1990.

Kingsbury, Carole. "Setting Passing Standards for High Stakes Exams." Educational Assessment Quarterly, 1:1 and 4. Summer 1992.

Kinlein, M. Lucille. "The Self-Care Concept." American Journal of Nursing, 77:598-601. April, 1977.

Kintgen-Andrews, Jean. "Philosophy Statements: Challenging Beliefs and Values." Nursing & Health Care, 9:437-38. October, 1988.

Kleiman, Carol. The 100 Best Job$ for the 1990s & Beyond. Chicago: Dearborn Financial Publishing, Inc., 1992.

Knutson, Karen, Linda D'Angelo, Marie DesChamps, Judy Steiner, Sandra Matherly, and Jane Rochester. Ambulatory Care Nursing Standards and Performance Evaluations. Denver: Center for Research in Ambulatory Health Care Administration, 1989.

Koerner, Beverly L. "Clarifying the Role of Nursing in Ambulatory Care." Journal of Ambulatory Care Management, 10:1-7. August, 1987.

Kovner, Anthony. Health Care Delivery in the United States. 4th ed. New York: Springer Publishing Company, 1990.

Kritek, Phyllis B. "Development of a Taxonomic Structure for Nursing Diagnoses: A Review and an Update." In Classification of Nursing Diagnoses: Proceedings of the Sixth Conference. Ed. Mary E. Hurley. St. Louis, MO: The C. V. Mosby Company, 1986.

Lang, Norma and Kristine Gebbie. "Nursing Taxonomy: NANDA and ANA Joint Venture Toward ICD-10CM." In Classification of Nursing Diagnoses: Proceedings of the Eighth Conference. Ed. Rose Mary Carroll-Johnson. Philadelphia: J. B. Lippincott Company, 1990.

Lashof, Joyce "APHA's Perspective on the Year 2000 Health Objectives." Paper delivered at the Southern California Public Health Association. Los Angeles, December 6, 1991.

"League 'Postpones' Action on Entry-Level Plan." American Journal of Nursing, 87:1091, 92, 1102-04. August, 1987.

Lederer, Janet Reiss, Gail L. Marculescu, Barbara Mocnik, and Nancy Seaby. Care Planning Pocket Guide: A Nursing Diagnosis Approach. 3rd ed. Redwood City, CA: Addison-Wesley Nursing, 1990.

Lederer, Janet Reiss, Gail L. Marculescu, Barbara Mocnik, and Nancy Seaby. Care Planning Pocket Guide: A Nursing Diagnosis Approach. 4th ed. Redwood City, CA: Addison-Wesley Nursing, 1991.

Ledvina, Theresa, Kathleen M. Phillips, and Lois J. Swanson. "Maximizing Nursing Potential Through Using Assistive Workers." Medical Group Management Journal, 37:26-30. March/April 1990.

Lee, Anthony A. "How DRGs Will Affect Your Hospital and You." RN, 47:71-81. May, 1984.

Lee, Anthony, and Ronni Sandroff. "1984 and Beyond: What's Ahead for Nursing." RN, 47:26-29. January, 1984.

Lenburg, Carrie B. The Clinical Performance Examination. New York: Appleton-Century-Crofts, 1979.

Lewis, Charles E,. and Barbara A. Resnik. "Nurse Clinics and Progressive Ambulatory Patient Care." The New England Journal of Medicine, 1967. Reprinted in Journal of the American Academy of Nurse Practitioners, 2:41-46. April-June, 1990.

Levine, Harold G. "Selecting Evaluation Instruments." In Evaluating Clinical Competence in the Health Professions, by Margaret K. Morgan and David M. Irby. St. Louis: The C. V. Mosby Company, 1978.

Litman, Theodor J,. and Leonard S. Robins. Health Politics and Policy. 2nd ed. Albany, NY: Delmar Publishers, 1991.

Long Beach City College Catalog, 1991-1992.

Long Beach City College Profile, 1991.

Long Beach City College. Vocational Nursing Faculty. Credit Course Outline. 1989.

Long Beach City College. Vocational Nursing Faculty. Vocational Nursing Curriculum Guide, 1992.

Los Angeles County Department of Health Services. Year 2000 Health Objectives, Development and Implementation Process. Los Angeles, n.d.

Luft, Harold S. Health Maintenance Organizations: Dimensions of Performance. New Brunswick: Transaction Books, 1987.

Lutz, Sandy. "Systems Find Ambulatory Care No Longer a Niche, but a Chasm." Modern Healthcare, 20:90-94. May 21, 1990.

Lyman, Donald O. "The Role of the State and Local Jurisdictions in the Year 2000 Health Objectives." Paper delivered at the Southern California Public Health Association. Los Angeles, December 6, 1991.

Mager, Robert F. Preparing Instructional Objectives. Belmont, CA: Feron Publishers, 1962.

Malloy, Bernadine. Personal Interview. April 14, 1992.

Marion Merrell Dow Inc. Managed Care Digest/HMO Edition 1990. Kansas City, MO, 1990.

Marion Merrell Dow Inc. Managed Care Digest/HMO Edition 1991. Kansas City, MO, 1991.

Martin, Karen S., and Nancy J. Scheet. The Omaha System: Applications for Community Health Nursing. Philadelphia: W. B. Saunders Company, 1992.

McMaster, Doris C., Paula M. Greer, and Hope E. Beanlands. "Ambulatory Care Nursing: A New Approach." Canadian Journal of Nursing Administration, 16-18. October, 1988.

McPherson, Alison, and Linda Dunatov. "Utilizing the Results: Grading and Curriculum Revision." In Evaluating Clinical Competence in the Health Professions, by Margaret K. Morgan and David M. Irby. St. Louis: The C. V. Mosby Company, 1978.

Merriam, Sharan B,. and Rosemary S. Caffarella. Learning in Adulthood. A Comprehensive Guide. San Francisco: Jossey-Bass Publishers, 1991.

Mayer, Gloria Gilbert, Mary Jane Madden, and Eunice Lawrenz. Patient Care Delivery Models. Rockville, MD: Aspen Publishers, Inc., 1990.

Meyers, Judith L., and Mary K. Stull. "The Use of Nursing Diagnoses in Community-Based Nursing Agencies." In Classification of Nursing Diagnosis: Proceedings of the Eighth Conference. Ed. Rose Mary Carroll-Johnson. Philadelphia: J. B. Lippincott Company, 1990.

Miller, Patricia L. "Setting Ambulatory Care Nursing Standards." Medical Group Management Journal, 37:38-40. March/April 1990.

Mitchell, Carol Ann. "One View of the Future: Nontraditional Education as the Norm." Nursing and Health Care, 11:187-90. April, 1990.

Moccia, Patricia. "1989:Shaping a Human Agenda for the Nineties: Trends that Demand Our Attention as Managed Care Prevails." Nursing and Health Care, 10:14-17. January, 1989.

Moore, Mary Ann, and Anita R. Geving. "Nursing's Role in the Ambulatory Care Setting." Medical Group Management Journal, 37:18-24. March/April, 1990.

Moreland, Betty. "Ambulatory Care: An Evolving Health Care Delivery System." Dimensions in Oncology Nursing, 4:4-6. Spring, 1990.

Morgan, Margaret K., and David M. Irby. Evaluating Clinical Competence in the Health Professions. St. Louis: The C. V. Mosby Company, 1978.

Murphy, Elizabeth. "The Evolving Role of the Nurse in Ambulatory Care." In Series on Nursing Administration. Eds. Marion Johnson and Joanne McCloskey. Menlo Park, CA: Addison-Wesley, 1988.

Naisbitt, John. Megatrends: Ten New Directions Transforming Our Lives. New York: Warner Books, 1984.

National Center for Health Statistics. Health, United States, 1990. Hyattsville, MD: Public Health Service, 1991.

National Council of State Boards of Nursing, Inc. NCLEX-PN Test Plan for the National Council Licensure Examination for Practical Nurses. Chicago, 1989.

National Federation of Licensed Practical Nurses. Nursing Practice Standards for the Licensed Practical/Vocational Nurse. Raleigh, NC: NFLPN, Inc., 1987

National League for Nursing Division of Research. Nursing Datasource, 1990: A Research Report, Volume IV—Focus on Practical/Vocational Nursing. New York: National League for Nursing, 1990.

"NLN Members Agree to Shelve Entry Issues and Call for Steps to Spur Career Mobility." American Journal of Nursing, 89:1082-83. August, 1989.

"NLN Readies Action of Nursing's Plan for Reforming Healthcare." American Journal of Nursing, 91:70. August, 1991.

Nornhold, Patricia. "90 Predictions for the 90s." Nursing90, 90:34-41. January, 1990.

North American Nursing Diagnosis Association. Membership Card. Np. 1991.

"North Dakota's High Court Frees Nursing Board to Enforce Its BSN Requirement for RN Licensure." American Journal of Nursing, 87:372-84, 85. March, 1987.

"Nursing Centers Offer More than a Shot in the Arm." RN, 55:13. July, 1992.

"Nursing Pitches Health-Care Agenda on the Hill." RN, 54:16. December, 1991.

"Nursing Shortage Poll Report." editors' report. Nursing88, 18:33-41. February, 1988.

Nursing's Agenda for Health Care Reform. Photocopy. N. p.: American Nurses' Association, 1991.

"The Oregon Health Plan." Photocopy. October 10, 1991.

O'Toole, Marie, Ed. Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health. 5th ed. Philadelphia: W. B. Saunders Company, 1992.

Orem, Dorothea E. Nursing Concepts of Practice. 3rd ed. New York: McGraw-Hill Book Company, 1985.

Orem, Dorothea E. Nursing Concepts of Practice. 4th ed. St. Louis: Mosby Year Book, 1991.

"Outpatient Operations Becoming Dominant." Insight, 55. April 24, 1989.

"Panel Predicts Worsening Hospital Financial Picture." editors' report. Hospitals, 66:82. March 20, 1992.

Parker, Marilyn E., Ed. Nursing Theories in Practice. New York: National League for Nursing, 1990.

Parrinello, Kathleen. "Measuring and Monitoring Nursing Intensity." Medical Group Management Journal, 37:32-35. March/April, 1990.

Parrinello, Kathleen, Phyllis S. Brenner, and Barbara Vallone. "Refining and Testing a Nursing Patient Classification Instrument In Ambulatory Care." Nursing Administration Quarterly, 13:54-65. Fall, 1988.

Parse, Rosemarie Rizzo. Nursing Science: Major Paradigms, Theories, and Critiques. Philadelphia: W. B. Saunders Company, 1987.

Paul, Richard. Critical Thinking: What Every Person Needs to Survive in a Rapidly Changing World. Rohnert Park, CA: Center for Critical Thinking and Moral Critique, 1990.

Pender, Nola J. Health Promotion in Nursing Practice. 2nd ed. Norwalk, CT: Appleton & Lange, 1987.

Pender, Nola J. "Languaging a Health Perspective for NANDA Taxonomy on Research and Theory." In Classification of Nursing Diagnosis: Proceedings of the Eighth Conference. Ed. Rose Mary Carroll-Johnson. Philadelphia: J. B. Lippincott Company, 1990.

Pinkley, Connie L. "Exploring NANDA's Definition of Nursing Diagnosis: Linking Diagnostic Judgments with the Selection of Outcomes and Interventions." Nursing Diagnosis, 2:26-32. January/March 1991.

Plomann, Marilyn Peacock and Franklin A. Schaffer. "DRGs as one of Nine Approaches to Case Mix in Transition." Nursing & Health Care, 4:438-43. October, 1983.

Popkess-Vawter, Sue. "Strength Oriented Nursing Diagnoses." In Classification of Nursing Diagnosis: Proceedings of the Fifth National Conference. Eds. Mi Ja Kim, Gertrude K. McFarland, and Audry M. McLane. St Louis: The C. V. Mosby Company, 1984.

Popkess-Vawter, Sue. "Wellness Nursing Diagnoses: To Be or Not To Be?" Nursing Diagnosis. 2:19-25. January/March, 1991.

Punch, Linda. "Pressure to Pare Length of Stay May Pose Liability Pitfalls for Hospitals." Modern Healthcare, 13:70. October, 1983.

Rauen, Karen Kaufmann. "Documentation of the Nursing Process in an Outpatient Clinic." Journal of Nursing Quality Assurance, 4:55-62. August, 1990.

Reilly, Dorothy E., and Marilyn H. Oermann. The Clinical Field: Its use in Nursing Education. Norwalk, CT: Appleton-Century-Crofts, 1985.

Ringsven, Mary K,. and Barbara M. Jorenby. Basic Community and Home Care Nursing. Albany, NY: Delmar Publishers, Inc., 1988.

"RN Groups Reach Consensus on Healthcare Reform." American Journal of Nursing, 91:69. July, 1991.

Robbins, Doris. Personal Interview. April 17, 1992.

Roemer, Milton I. An Introduction to the U. S. Health Care System 2nd ed. New York: Springer Publishing Company, 1986.

Rosdahl, Caroline Bunker. Textbook of Basic Nursing. 4th ed. Philadelphia: J. B. Lippincott Company, 1985.

Rosenblum, Robert W., Lucia F. Miree, and Harriet G. Tolpin. "Changing Times, Changing Theories: The Effects of HMOs on Hospital Usage and Ambulatory Care." Journal of Ambulatory Care Management, 12:69-75. August, 1989.

Saba, Virginia K. "Nursing Diagnosis in Computerized Patient Classification Systems." In Classification of Nursing Diagnosis: Proceedings of the Eighth Conference. Ed. Rose Mary Carroll-Johnson. Philadelphia: J. B. Lippincott Company, 1990.

Sanchez, Carmen Carrion. NURSE: Registered Nurse, Licensed Practical Nurse, Public Health Nurse. New York: Prentice Hall Trade, 1987

Santo-Novak, Debra A. "Seven Keys to Assessing the Elderly." Nursing88, 18:60-63. August, 1988.

Scherer, Priscilla. "When every Day Is Saturday: The Shortage." AJN, 87:1284-90. October, 1987.

Scriven, M. "Evaluation Perspectives and Procedures." In Evaluation in Education. Ed. W. J. Popham. Berkeley, CA: McCutchan, 1974.

"Seeing the Future." Trends. Nursing84, 47:17-18. June, 1984.

Segal, Eleanor Tintner. "Is Nursing a Profession? NO." Nursing 85, 15:41-43. June, 1985.

Selbert, Roger. "Health Care Forecasts." Future Scan, 544:1-3. August 24, 1987.

Selbert, Roger. "Health Care Cost Containment in the '90s." Future Scan, 638:1-4. December, 1990.

Shea, Susan Ireland. "Our Patients Face Recovery With Confidence." RN, 55:17-20. June, 1992.

Shenot, Christine. "Low-cost Surgery, Big Profits." Investor's Daily, October 18, 1991, A1.

Shenot, Christine. "Medical Care Int'l, Critical Care to Merge: Transaction Will Join Two Pioneers in Outpatient Services." Investor's Daily, June 18, 1992, A1-2.

Shouldice, Robert G. "HMO Facts and Fictions." Medical Group Management Journal, 37:16 and 68. March/April 1990.

Simmons, Delanne A. "Implementation of Nursing Diagnosis in a Community Health Setting." In Classification of Nursing Diagnosis: Proceedings of the Sixth Conference. Ed. Mary E. Hurley. St. Louis, MO: The C. V. Mosby Company, 1986.

Smith, Carole E. "DRGs: Making the System Work for You." Nursing85, 15:34-41. January, 1985.

Smyth, Kathleen. "Justice and Cooperation: Moving Ambulatory Care Practice into the 21st Century." Journal of Ambulatory Care Management. 10:76-81. August, 1987.

Steinbrook, Robert. "HMO Care Rated as Superior." Los Angeles Times, May 5, 1991, A1.

Stevens, Barbara J. Nursing Theory: Analysis, Application, Evaluation. Boston: Little, Brown and Company, 1979.

Steiger, Nancy J,. and Juliene G. Lipson. Self-Care Nursing Theory and Practice. Bowie, MD: Brady Communications Company, A Prentice-Hall Publishing Company, 1985.

Stevens, Barbara J. Nursing Theory, Analysis, Application, Evaluation, 2nd ed. Boston: Little, Brown and Company, 1984.

Studin, Ira, Russell C. Coile, Jr., and Dennis W. Strum. "Future of Hospital-Based Nursing Explored." Hospital Forum, 27:65-66. July/August, 1984.

Stufflebeam, D. L. "Alternative Approaches to Educational Evaluation: A Self-Study Guide for Educators." In Evaluation in Education. Ed. W. J. Popham. Berkeley, CA: McCutchan, 1974.

Styles, Margretta. "Will the Profession Unite?" American Journal of Nursing, 90:83. October, 1990.

Sundeen, Sandra J., Gail Wiscarz Stuart, Elizabeth Anne DeSalvo Rankin, and Sylvia Ann Cohen. Nurse-Client Interaction: Implementing the Nursing Process. St Louis: The C. V. Mosby Company, 1989.

Tartaglia, Michael. "Nursing Diagnosis: Keystone of Your Care Plan." Nursing85, 15:34-37. March 1985.

Taylor, Carol, Carol Lillis, and Priscilla LeMone. Fundamentals of Nursing: The Art and Science of Nursing Care. Philadelphia: J. B. Lippincott Company, 1989.

Tighe, Mary Grace, Susan Gross Fisher, Clare Hastings, and Barbara Heller. "A Study of the Oncology Nurse Role in Ambulatory Care." Oncology Nursing Forum, 12:23-27. November/December, 1985.

Tyler, Ralph W. Basic Principles of Curriculum and Instruction. Chicago: The University of Chicago Press, 1949.

U. S. Department of Health and Human Services. A Guide for Establishing Public Health Priorities. Atlanta, GA: Public Health Service, Centers for Disease Control, June, 1986.

U. S. Department of Health and Human Services. Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, D.C.: U.S. Government Printing Office, 1991.

Verran, Joyce A. "Delineation of Ambulatory Care Nursing Practice." The Journal of Ambulatory Care Management, 4:1-13. May, 1981.

Verran, Joyce A. "Patient Classification in Ambulatory Care." Nursing Economic$, 4:247-251. September/October 1986.

Verran, Joyce A., and Pamela J. Reid. "Replicated Testing of the Nursing Technology Model." Nursing Research, 36:190-94. May/June, 1987.

Wilkinson, Judith. Nursing Process in Action: A Critical Thinking Approach. Redwood City, CA: Addison-Wesley Nursing, 1991.

Wilson, Florence A., and Duncan Neuhauser. Health Services in the United States. Cambridge, MA: Ballinger Publishing Company, 1985.

Whitley, Georgia and Ann Dillon. "Nursing Curricula in the 80s—The Impact of Nursing Diagnosis." Journal of Nursing Education, 27:233-35. May, 1988.

Yinger, Robert. J. "Can We Really Teach Them to Think?" In Fostering Critical Thinking. Robert Young, Ed. San Francisco: Jossey-Bass Inc., 1980.

Zylinski, Doris. Comparative Study of Vocational Nursing Curriculum and Employer Requirements. Napa Valley, CA: Napa Valley College, 1990.

Zylinski, Doris. Update: Comparative Study of Vocational Nursing Curriculum and Employer Requirements. Napa Valley, CA: Napa Valley College, 1992.

APPENDIX A

BVNPTE EXECUTIVE OFFICER'S INTERVIEW OUTLINE

BVNPTE EXECUTIVE OFFICER'S INTERVIEW OUTLINE

The purpose of this interview is to gather information about the present and future place of the vocational nurse in ambulatory care, and future trends in vocational nursing curricula.

Name ______________________________ Date ______________

Agency ____

BACKGROUND

1. How long have you been the executive officer for the Board of Vocational Nurse and Psychiatric Technician Examiners? ______________________________

2. What was your educational preparation for this job?

____

3. What kind of experience did you bring to this job?

____

____

PRESENT AND FUTURE PLACE OF THE VOCATIONAL NURSE IN AMBULATORY CARE

For the following questions, please feel free to add any explanations you wish to your answers.

4. In the next five years, will the number of LVN jobs in ambulatory care change?
   a. ___ Increase
   b. ___ Stay about the same
   c. ___ Decrease

   The reason(s)?______________________________________

____

5. In the next ten years, will the number of LVN jobs in ambulatory care change?
   a. ___ Increase
   b. ___ Stay about the same
   c. ___ Decrease

   The reason(s)?____

   ____

6. In the next five years, will the amount of preventive nursing care practiced by LVNs change?
   a. ___ Increase
   b. ___ Stay about the same
   c. ___ Decrease

   The reason(s)?____

   ____

7. Evaluate the following disease prevention efforts by LVNs as essential (E), supplementary (S), or unnecessary (U).

	E	S	U	
a.	___	___	___	Heart disease
b.	___	___	___	Cancer
c.	___	___	___	Hypertension
d.	___	___	___	Diabetes
e.	___	___	___	Emphysema
f.	___	___	___	Glaucoma
g.	___	___	___	AIDS
h.	___	___	___	______________________________
i.	___	___	___	______________________________

8. In the next five years, will the amount of wellness nursing care practiced by LVNs change?
a. ___ Increase
b. ___ Stay about the same
c. ___ Decrease

The reason(s)?____

9. Evaluate the following wellness promotion efforts by LVNs as essential (E), supplementary (S), or unnecessary (U).

E S U
a. ___ ___ ___ Diet
b. ___ ___ ___ Exercise
c. ___ ___ ___ Stress control
d. ___ ___ ___ Weight loss
e. ___ ___ ___ Personal accident prevention
f. ___ ___ ___ Smoking cessation
g. ___ ___ ___ Substance abuse control

h. ___ ___ ___ ____

i. ___ ___ ___ ____

10. Do today's LVNs need skill in assessment in the areas listed below?

YES NO
a. ___ ___ Brief (5 minute) physical assessments
b. ___ ___ Psychological function
c. ___ ___ Social function
d. ___ ___ Spiritual function
e. ___ ___ Habits of daily living
f. ___ ___ Neuro checks
g. ___ ___ Respiratory function (dyspnea, coughing)
h. ___ ___ Cardiac function (edema, SOB)
i. ___ ___ Digestion and bowel function
j. ___ ___ Sexual function
k. ___ ___ Bladder function
l. ___ ___ Range of motion and muscle strength

m. ___ ___ ____

n. ___ ___ ____

11. Do today's LVNs need skill in teaching clients?

YES NO
a. ___ ___ Mental health and stress management

b. ___ ___ Psychosocial and spiritual functioning

c. ___ ___ Habits of daily living such as basic nutrition, weight loss, dental health, bodily cleanliness
d. ___ ___ Home management of diseases such as stroke, Alzheimer's Disease, asthma, emphysema, congestive heart failure, and diabetes
e. ___ ___ Management of physiologic functioning such as bowel elimination, bladder function, and exercise
f. ___ ___ Substance abuse control and smoking cessation
g. ___ ___ Personal accident prevention

h. ___ ___ ______________________________

i. ___ ___ ______________________________

12. Today, what should be included in the role of the majority of LVNs in ambulatory care? Rank the following areas as essential (E), supplementary (S), unnecessary (U).

E S U
a. ___ ___ ___ Make brief (5 minute) physical assessments
b. ___ ___ ___ Take vital signs
c. ___ ___ ___ Prepare the client to be examined by the doctor
d. ___ ___ ___ Assist the doctor
e. ___ ___ ___ Administer medications
f. ___ ___ ___ Teach clients to implement medical orders to manage their illnesses
g. ___ ___ ___ Teach clients to make life-style changes to manage their illnesses
h. ___ ___ ___ Help clients to change their life styles to prevent specific illness
i. ___ ___ ___ Teach clients to adopt generally healthier life styles

j. ___ ___ ___ ______________________________

k. ___ ___ ___ ______________________________

13. Five years from now, what should be included in the role of the majority of LVNs in ambulatory care? Rank the following areas as essential (E), supplementary (S), unnecessary (U).

E S U

a. ___ ___ ___ Make brief (5 minute) physical assessments
b. ___ ___ ___ Take vital signs
c. ___ ___ ___ Prepare the client to be examined by the doctor
d. ___ ___ ___ Assist the doctor
e. ___ ___ ___ Administer medications
f. ___ ___ ___ Teach clients to implement medical orders to manage their illnesses
g. ___ ___ ___ Teach clients to make life style changes to manage their illnesses
h. ___ ___ ___ Help clients to change their life styles to prevent specific illness
i. ___ ___ ___ Teach clients to adopt generally healthier life styles

j. ___ ___ ___ ____

k. ___ ___ ___ ____

14. Ten years from now, what should be included in the role of the majority of LVNs in ambulatory care? Rank the following areas as essential (E), supplementary (S), unnecessary (U).

E S U

a. ___ ___ ___ Make brief (5 minute) physical assessments
b. ___ ___ ___ Take vital signs
c. ___ ___ ___ Prepare the client to be examined by the doctor
d. ___ ___ ___ Assist the doctor
e. ___ ___ ___ Administer medications
f. ___ ___ ___ Teach clients to implement medical orders to manage their illnesses
g. ___ ___ ___ Teach clients to make life style changes to manage their illnesses
h. ___ ___ ___ Help clients to change their life styles to prevent specific illness
i. ___ ___ ___ Teach clients to adopt generally healthier life styles

j. ___ ___ ___ ____

k. ___ ___ ___ ____

15. To determine your opinion of how the BVNPTE can integrate and implement the current changes in practice, especially the shift of care out of acute care facilities and into other forms of care, please say whether you agree with the following statements:

YES NO

a. ___ ___ The Board will expect schools to make appropriate changes within the present regulatory structure (optional 18 hour observation or up to 54 hour "hands-on" experience with weekly instructor visits).

b. ___ ___ The Board will expand the hours (54) that are presently permitted for "hands-on" experience in community health agencies to _____ hours.

c. ___ ___ The Board will require that all community health experiences be "hands on" rather than observational.

d. ___ ___ The Board will require a "hands-on" community health experience of ____ hours.

e. ___ ___ The Board will continue to permit instructors to visit community heath agencies on a weekly basis.

f. ___ ___ For experiences of more than 54 hours, the Board will require ______ instructor visits per week.

g. ___ ___ Other regulatory possibilities, please list them.

____

____

____

16. To ascertain how educators can inform the board about changes in nursing practice, please say whether you agree with the following statements:

YES NO

a. ___ ___ Educators should communicate to their consultants with
    ___ information
    ___ recommendations

b. ___ ___ Educators should communicate to the Board's executive director with
    ___ information
    ___ recommendations

c. ___ ___ Educators should communicate to the president of the board with
    ___ information
    ___ recommendations

d. ___ ___ Educators should communicate to the chair of the education committee with
    ___ information
    ___ recommendations

e. ___ ___ Educators should attend meetings for formal dialogue between Board representatives and educators and share
    ___ information
    ___ recommendations

f. ___ ___ Educators should expect that the Board will keep abreast of changes in practice and will initiate appropriate regulatory changes as the times demand.

g. Please list other ways of informing the Board.

____

____

17. To determine your opinion of the future of the medical model e.g., the cardiovascular, gastrointestinal and other systems, as a framework for vocational nursing curricula, please answer the questions below and say whether you agree with the statements that follow.

a. What percent of vocational nursing schools in California report the type of theoretical framework they use for their curriculum? _____%

b. What percent of vocational nursing schools in California use the medical model as a framework for their nursing curricula? _____%

YES NO

c. ___ ___ The medical model is an acceptable model for vocational nursing schools, now, and for the foreseeable future.

d. ___ ___ The medical model is an acceptable model now, but will be obsolete in _____ years.

e. ___ ___ Although many nursing schools still use the medical model it should be changed to a nursing model as rapidly as possible.

f. ___ ___ Have you any other comments about the medical model as a curricular framework for nursing schools?

____

____

18. To determine your opinion of the future of nursing models to structure vocational nursing curricula, please state whether you agree with the following statements:

YES NO

a. ___ ___ The Board should permit vocational nursing schools to function without a theoretical model for their curricula.

b. ___ ___ The Board should permit vocational nursing schools to use either a medical model or a nursing theory and only require them to identify and demonstrate the kind of theoretical model they are using.

c. ___ ___ The Board should require vocational nursing schools to adopt a nursing theory that has been widely published in the nursing literature.

d. ___ ___ The Board should permit vocational nursing schools to use a locally developed, unpublished, nursing theory.

e. ___ ___ The Board should require vocational nursing schools to adopt a nursing theory as a curricular framework within the next ___ years.

f. ___ ___ Have you any other comments about nursing theories as curricular frameworks for nursing schools?

____

____

19. To determine your opinion of the place of nursing diagnoses in vocational nursing curricula please say whether you agree with the following statements.

YES NO

a. ___ ___"Nursing diagnosis gives all nurses a common language to communicate the uniqueness of the work that we do." (NANDA, 1990).

b. ___ ___ Nursing diagnosis is an essential step of the nursing process.

c. ___ ___ Nursing diagnosis should be introduced to all vocational nursing students.

d. ___ ___ The Board should permit vocational nursing schools to teach nursing diagnosis as they wish.

e. ___ ___ The Board should permit vocational nursing schools to teach nursing diagnosis, with some limitations, such as:

____

f. ___ ___ The Board should require vocational nursing schools to teach nursing diagnosis, without limitations, within the next ___ years.

g. ___ ___ The Board should permit vocational nursing schools to determine the type of nursing diagnostic terminology used to teach nursing diagnosis.

h. ___ ___ If nursing diagnoses are taught in vocational nursing schools, the Board should require that NANDA terminology be used.

i. ___ ___ Nursing diagnosis is the prerogative of professional registered nurses and should not be introduced in a vocational nursing program.

j. ___ ___ Have you any other comments about nursing diagnosis as a part of vocational nursing curricula?

____

____

Thank you for agreeing to be interviewed. Your comments will be very helpful in understanding the future for ambulatory care nursing education.

APPENDIX B

BVNPTE CONSULTANT'S INTERVIEW OUTLINE AND BOARD POLICY:

SKILLS EXPECTED TO BE TAUGHT IN VOCATIONAL NURSING PROGRAMS

BVNPTE EDUCATIONAL CONSULTANT'S INTERVIEW OUTLINE

The purpose of this interview is to gather information about the structure of an ambulatory care clinical experience, and skills to be learned in ambulatory care facilities.

Name ______________________________ Date ____________________

Agency ____

BACKGROUND

1. How long have you been an educational consultant for the Board of Vocational Nurse and Psychiatric Technician Examiners? ______________________________
2. What was your educational preparation for this job? ______________________________
____
3. What kind of experience did you bring to this job? ______________________________
____
____

STRUCTURE OF AN AMBULATORY CARE CLINICAL EXPERIENCE

4. At Long Beach City College (LBCC) the ambulatory care experience is structured as a hands-on, community health experience (Board Policy 3.3 on page 242). After your approval (3/2/88), the board granted an exemption to the 54 hour limit, and this experience is now scheduled for 108 hours. Since board policy permits this experience to be arranged without a full time teacher at the facility, we use the following criteria to guide the implementation of this experience. Check the criteria as essential (E), supplementary (S), or unnecessary (U). Please also list any additional criteria you would add.

Criteria Related to the Behavioral Objectives

	E	S	U	
a.	___	___	___	The behavioral objectives are clear.
b.	___	___	___	The objectives detail all of the important expected behaviors for each day of the experience.
c.	___	___	___	The behavioral objectives require practice rather than initial learning experiences.
d.	___	___	___	The behavioral objectives require performance of routine nursing tasks (to teach reality).
e.	___	___	___	The behavioral objectives require challenging nursing tasks (to avoid boredom).
f.	___	___	___	The opportunities to meet the objectives are available in the agencies.
g.	___	___	___	______________________________

Criteria Related to the Students

E S U

h. ___ ___ ___ The students have written copies of the required behavioral objectives.

i. ___ ___ ___ The students have enough experience that they can meet the behavioral objectives with minimal instructor support.

j. ___ ___ ___ The students are required to meet the behavioral objectives in order to complete the course.

k. ___ ___ ___ The students are provided with ways to record their daily progress in meeting the behavioral objectives.

l. ___ ___ ___ ______________________________

Criteria Related to the Agency

E S U

m. ___ ___ ___ The agency administration approves of and supports the school's objectives for the students.

n. ___ ___ ___ The staff is informed of the student behaviors required to complete the course requirements.

o. ___ ___ ___ The staff is able to perform the nursing skills required of the students (this sometimes requires in-service education by the instructor or agency).

p. ___ ___ ___ The staff is willing to facilitate the students' meeting of the behavioral objectives.

q. ___ ___ ___ The staff is willing to countersign the students' records to verify that the students have met the daily behavioral objectives.

r. ___ ___ ___ ______________________________

Criteria Related to the Instructor

E S U

s. ___ ___ ___ Each week, the instructor talks with the charge nurse, to determine his/her assessment of the students' accomplishment of the behavioral objectives.

t. ___ ___ ___ Each week, the instructor talks with several of the staff nurses, to determine their assessment of the students' accomplishment of the behavioral objectives.

u. ___ ___ ___ Each week, the instructor talks with each student and examines the student's records of behavioral objectives accomplished, to determine the student's accomplishment of the behavioral objectives.

v. ___ ___ ___ Each week, the instructor evaluates and records the students' accomplishment of the behavioral objectives.

w. ___ ___ ___ The instructor is willing to assess and resolve interpersonal problems between students and staff on a weekly basis.

x. ___ ___ ___ The instructor is willing to give guidance to the students to help them to meet the behavioral objectives.

y. ___ ___ ___ If needed, the instructor is willing to give brief individual instructions to the students to help them to meet the behavioral objectives.

z. ___ ___ ___ ______________________________

SKILLS TO BE LEARNED IN AMBULATORY CARE FACILITIES

5. On the following list of LBCC ambulatory care nursing skills, check the skills as essential (E), supplementary (S), or unnecessary (U). Also, please add any skills you wish.

Make a baseline assessment:

E S U
a. ___ ___ ___ Observe the client for visible signs of pathology
b. ___ ___ ___ Ask the client to relate his symptoms
c. ___ ___ ___ Select the significant observations
d. ___ ___ ___ Differentiate between an observation that requires a nursing action or a medical action
e. ___ ___ ___ If a nursing action is needed, determine what nursing action should occur
f. ___ ___ ___ Prepare the client for the doctor's examination

g. ___ ___ ___ ____

* * * * *

Teach client health concepts:

E S U
h. ___ ___ ___ Determine the client's knowledge of a subject, before teaching is begun
i. ___ ___ ___ Teach a health related subject to a client
j. ___ ___ ___ Determine what the client understood

k. ___ ___ ___ ____

* * * * *

Take a nursing history by asking questions about:

E S U
l. ___ ___ ___ Respiratory status (dyspnea, coughing, shortness of breath)
m. ___ ___ ___ Nutritional status
n. ___ ___ ___ Excretory habits and hygiene
o. ___ ___ ___ Activity and rest
p. ___ ___ ___ General comfort
q. ___ ___ ___ Quality of solitude and social interactions
r. ___ ___ ___ The client's safety status
s. ___ ___ ___ Normalcy of self-concept
t. ___ ___ ___ Spiritual satisfaction

u. ___ ___ ___ ____

* * * * *

Perform a nursing physical assessment:

E S U
v. ___ ___ ___ Ask the client his/her chief complaint
w. ___ ___ ___ Test for distance vision with a Snellen Chart
x. ___ ___ ___ Test hearing with an audiometer
y. ___ ___ ___ Examine the mouth with a light and tongue blade
z. ___ ___ ___ Teach a client to do a self-examination of her breasts
aa. ___ ___ ___ Recognize the presence of barrel chest
bb. ___ ___ ___ Recognize presence of abnormal breath sounds
cc. ___ ___ ___ Recognize presence of abnormal heart sounds
dd. ___ ___ ___ Palpate femoral and pedal pulses

ee. ___ ___ ___ Estimate the amount of ankle edema
ff. ___ ___ ___ Recognize absence of bowel sounds
gg. ___ ___ ___ Evaluate basic mental status

hh. ___ ___ ___ ____

* * * * *

Teach about a normal healthy diet:

E S U
ii. ___ ___ ___ Elicit information about daily foods eaten
jj. ___ ___ ___ Sort the client's daily foods into the Basic Four Food Groups
kk. ___ ___ ___ Estimate the daily calories eaten and deficiency or excess of calories
ll. ___ ___ ___ Estimate the deficiency or excess of fluids drunk
mm. ___ ___ ___ Assist the client to modify his/her diet, if needed

nn. ___ ___ ___ ____

* * * * *

Take a client drug history:

E S U
oo. ___ ___ ___ Gather data about prescription and over-the-counter drugs
pp. ___ ___ ___ Discuss problems about possibly undesirable drug combinations with the physician
qq. ___ ___ ___ Help the client set up a schedule for taking his/her medications

rr. ___ ___ ___ ____

* * * * *

Assess range of motion and muscle strength, and teach appropriate exercises:

E S U
ss. ___ ___ ___ Estimate the degrees of flexion and extension of the major joints
tt. ___ ___ ___ Evaluate range of motion of the major joints
uu. ___ ___ ___ Test bilateral muscle strength to assess for unilateral muscle weakness
vv. ___ ___ ___ Test for intact sensation in the extremities,
ww. ___ ___ ___ With physician approval, teach appropriate exercises to a client, to improve range of motion and muscle strength

xx. ___ ___ ___ ____

* * * * *

6. Since 1988, the trend toward shorter hospital stays and increasing expansion of ambulatory care has continued. In order to determine your opinion of the value of ambulatory care learning experiences, please say whether you agree with the following statements:

YES NO
a. ___ ___ It would be appropriate for other schools to consider establishing an ambulatory care experience.
b. ___ ___ Other schools should consider utilizing community heath agencies as clinical learning sites, even though they could only provide instructor support on a weekly basis.

YES NO

c. __ __ It would be appropriate for other schools to consider requesting an increase in their hours of ambulatory care experience, beyond the board policy of 54 hours.

d. __ __ ____

7. In order to determine whether the LBCC criteria could be adapted and used as guides for other schools in setting up ambulatory care experiences, please say how you would modify the:

a. Criteria related to the behavioral objectives

Add: ____

Delete: ____

Change: ____

b. Criteria related to the students

Add: ____

Delete: ____

Change: ____

c. Criteria related to the clinical agency

Add: ____

Delete: ____

Change: ____

d. Criteria related to the instructor

Add: ____

Delete: ____

Change: ____

8. In order to determine whether the LBCC skills could be adapted and used as guides for other schools in setting up ambulatory care experiences, please say how you would modify the:

a. Skills related to baseline assessments (question 5; areas, a-g)

Add: ____

Delete: ____

Change: ____

b. Skills related to teaching clients (question 5; areas, h-k)

Add: ______________________________

Delete: ______________________________

Change: ______________________________

c. Skills related to a nursing history (question 5; areas, l-u

Add: ______________________________

Delete: ______________________________

Change: ______________________________

d. Skills related to a nursing physical assessment (question 5; areas v-hh)

Add: ______________________________

Delete: ______________________________

Change: ______________________________

e. Skills related to teaching a normal healthy diet (question 5; areas ii-nn)

Add: ______________________________

Delete: ______________________________

Change: ______________________________

f. Skills related to a drug history (question 5; areas oo-rr)

Add: ______________________________

Delete: ______________________________

Change: ______________________________

g. Skills related to range of motion (question 5; areas ss-xx)

Add: ______________________________

Delete: ______________________________

Change: ______________________________

Thank you for agreeing to be interviewed. Your comments will be very helpful in understanding the future for LVNs in ambulatory care.

3.3 COMMUNITY HEALTH AGENCIES

Students may be assigned to community health agencies as an optional medical/surgical experience provided the experience corresponds to the theory being taught and has specific clinical objectives.

Community health agencies include public health clinics, visiting nurses associations, home health agencies, ambulatory surgery centers, community mental health clinics and centers for the developmentally disabled/mentally disordered.

1. If the objectives are solely observational in nature, the length of clinical experience should be limited to 18 hours.

2. If the objectives are solely hands-on or a combination of observation and hands-on, the length of the clinical experience should be limited to 54 hours.*

3. a) If there is a diverse patient population, the clinical experience should be designated as medical/surgical experience.
   b) If the patient population is pediatric, the clinical experience should be designated as pediatric clinical experience.
   c) If the patient population is psychiatric, the clinical experience should be designated as mentally disordered, developmentally disabled, or psychiatric.

4. Only licensed/certified (regulated) agencies should be utilized.

5. The maximum clinical hours should be limited to 54 hours.*

6. The clinical experience should take place after completion of Nursing Fundamentals.

7. The clinical experience should not be utilized for team leading experience.

8. Instructor should visit community health/home care agencies on a weekly basis. Director should submit a schedule for on-site agency visits with facility forms for Board approval.

---

*An exemption was granted 3/2/88, based on detailed self-guiding behavioral objectives, that allows the Long Beach City College to increase the clinical experience from 54 to 108 hours.

BOARD POLICY
SKILLS EXPECTED TO BE TAUGHT IN VOCATIONAL NURSING PROGRAMS

The law (Section 2859 B and P Code) permits Licensed Vocational Nurses to perform those functions which have been taught in an accredited program in vocational nursing. The following list of skills developed by the Board of Vocational Nurse and Psychiatric Technician Examiners is not to be construed as limiting the L.V.N. to these functions alone. It is obvious that many of the functions listed include related functions not specifically delineated. In addition, licensees will learn new patient care functions related to new developments in health care which have not been envisioned at the time the list is developed.

In order to ensure that graduates of all accredited vocational nursing programs are prepared to carry out the normally accepted functions of a licensed vocational nurse, the Board of Vocational Nurse and Psychiatric Technician Examiners has developed the following list of experiences for the guidance of faculty. Patient care and preparation of the equipment should be included in each experience.

NURSING CARE SKILLS TO BE TAUGHT IN VOCATIONAL NURSING PROGRAMS

Admission of patient
Assisting with medical examination and procedures
Ambulation techniques
Bedmaking
Binders
Cardiac monitor
Care plans
Cast care and traction
Catheter care
Charting, communication
Chest tubes
Collection of specimens
Colostomy care
CPR (cardio-pulmonary-resuscitation)
Diabetic urine testing
Discharge patient
Elimination needs including fecal impaction
Enema
Feeding patient
Gastrostomy feeding
Hot and cold applications

Intake and output
Isolation technique
IV technique: regulate flow rate and discontinue
Nasogastric tube: insertion and feeding
Neurological check
Observations: significant changes in signs and symptoms
Oxygen administration and humidity
Personal hygiene and comfort measures
Positioning and transfer
Positive pressure apparatus
Postural drainage
Pre-op and post-op care
Range of motion
Restraints
Skin care
Sterile dressing change
Sterile irrigations
Suctioning
Suture removal
Tracheostomy care
Urinary catheterization

SKILLS THAT ARE NOT WITHIN THE SCOPE OF PRACTICE FOR LICENSED VOCATIONAL NURSES

UNDER ALL CIRCUMSTANCES:
Intravenous medications
Pressure lines (including CVP and Swan-Ganz)
Vaginal examinations

WHEN CARE IS GIVEN IN THE HOME:
Insertion or removal of outer cannulas
Deep endotracheal suctioning
Ventilation care
Administration of blood

10/74, Rev. 1/84

APPENDIX C

AMBULATORY ADMINISTRATORS' INTERVIEW OUTLINE

AMBULATORY ADMINISTRATORS' INTERVIEW OUTLINE

The purpose of this survey is to gather information about: (1) present and future trends in ambulatory care, (2) time structure of the ambulatory care experience, (3) and theory content of the ambulatory care experience.

Name ______________________________ Date ____________________

Agency ____

BACKGROUND

1. How long have you worked in ambulatory care?

____

2. What was your educational preparation for this job?

____

3. What kind of experience did you bring to this job?

____

____

PRESENT AND FUTURE TRENDS IN AMBULATORY CARE

For the following questions, check your answers and please feel free to add any explanations you wish.

4. In the next **five** years, will ambulatory care **growth** change?
   a. ___ Decrease
   b.___ Stay about the same
   c. ___ Increase

   The reason(s)? ____

   The area(s)? ____

5. In the next **ten** years, will ambulatory care **growth** change?
   a. ___ Decrease
   b. ___ Stay about the same
   c. ___ Increase

   The reason(s)? ____

   The area(s)? ____

6. In the next **five** years, will the amount of **preventive** nursing care practiced by LVNs in ambulatory care change?

a. ___ Increase
b. ___ Stay about the same
c. ___ Decrease

The reason(s)? ____

The area(s)? ____

7. Evaluate the following disease **prevention** efforts by LVNs as Essential (E), Supplementary (S), or Unnecessary (U).

	E	S	U	
a.	___	___	___	Heart disease
b.	___	___	___	Cancer
c.	___	___	___	Hypertension
d.	___	___	___	Diabetes
e.	___	___	___	Emphysema
f.	___	___	___	Glaucoma
g.	___	___	___	AIDS
h.	___	___		________________________________
i.	___	___		________________________________

8. In the next **five** years, will the amount of **wellness** nursing care practiced by LVNs in ambulatory care change?

a.___Increase
b.___Stay about the same
c.___Decrease

The reason(s)? ____

9. Evaluate the following **wellness** promotion efforts by LVNs as Essential (E), Supplementary (S), or Unnecessary (U).

	E	S	U	
a.	___	___	___	Diet
b.	___	___	___	Exercise
c.	___	___	___	Stress control
d.	___	___	___	Weight loss
e.	___	___	___	Personal accident prevention
f.	___	___	___	Smoking cessation
g.	___	___	___	Substance abuse control
h.	___	___	___	________________________________
i.	___	___	___	________________________________

10. Do today's ambulatory care LVNs need skill in **assessment** in the areas listed below?

YES NO
a. ____ ____ Brief baseline assessments
b. ____ ____ Psychological function
c. ____ ____ Social function
d. ____ ____ Spiritual function
e. ____ ____ Habits of daily living
f. ____ ____ Neuro checks
g. ____ ____ Respiratory function
h. ____ ____ Cardiac function (edema and SOB)
i. ____ ____ Digestion and bowel function
j. ____ ____ Sexual function
k. ____ ____ Bladder function
l. ____ ____ Range of motion and muscle strength

m. ____ ____ ____

n. ____ ____ ____

11. Do today's ambulatory care LVNs need skill in **teaching** clients?

YES NO
a. ____ ____ Mental health and stress management
b. ____ ____ Psychosocial and spiritual functioning
c. ____ ____ Habits of daily living such as basic nutrition, weight loss, dental health, bodily cleanliness
d. ____ ____ Home management of diseases such as stroke, Alzheimer's Disease, asthma, emphysema, congestive heart failure, and diabetes
e. ____ ____ Management of physiologic functioning such as bowel elimination, bladder function, and exercise
f. ____ ____ Substance abuse control and smoking cessation
g. ____ ____ Personal accident prevention

h. ____ ____ ____

i. ____ ____ ____

12. **Today**, what should be included in the **role** of the majority of LVNs in ambulatory care? Evaluate the areas as Essential (E), Supplementary (S), Unnecessary (U).

E S U
a. ___ ___ ___ Make initial (5 minute) baseline assessments
b. ___ ___ ___ Take vital signs
c. ___ ___ ___ Prepare the client to be examined by the doctor
d. ___ ___ ___ Assist the doctor
e. ___ ___ ___ Administer medications
f. ___ ___ ___ Teach clients to implement medical orders to manage their illnesses
g. ___ ___ ___ Teach clients to make life-style changes to **manage** their illnesses
h. ___ ___ ___ Help clients to change their life styles to **prevent** specific illness

E S U
i. ___ ___ ___ Teach clients to adopt generally healthier life styles

j. ___ ___ ___ ____

k. ___ ___ ___ ____

13. **Five** years from now, what should be included in the **role** of the majority of LVNs in ambulatory care? Rank the included areas as Essential (E), Supplementary (S), Unnecessary (U).

E S U
a. ___ ___ ___ Make initial (5 minute) baseline assessments
b. ___ ___ ___ Take vital signs
c. ___ ___ ___ Prepare the client to be examined by the doctor
d. ___ ___ ___ Assist the doctor
e. ___ ___ ___ Administer medications
f. ___ ___ ___ Teach clients to implement medical orders to manage their illnesses
g. ___ ___ ___ Teach clients to make life style changes to **manage** their illnesses
h. ___ ___ ___ Help clients to change their life styles to **prevent** specific illness
i. ___ ___ ___ Teach clients to adopt generally healthier life styles

j. ___ ___ ___ ____

k. ___ ___ ___ ____

TIME STRUCTURE OF THE AMBULATORY CARE EXPERIENCE

14. Currently the **time structure** for the LBCC ambulatory care clinical experience is a three day a week experience for four weeks. What suggestions would you make to improve this time structure?

a. ___ Make it shorter
b. ___ Leave it the same
c. ___ Make it longer

d. Any other suggestions? ________________________________

15. The **teacher** for the LBCC ambulatory care experience visits the students once a week. Can students have a satisfactory to excellent learning experience in an ambulatory care facility, without a full time teacher at the facility?

a. ___ Yes
b. ___ Yes with qualifications
c. ___ No

d. List qualifications or explain your answer. ________________________

____

16. Would it help students in an ambulatory care experience learn the **beginning teaching** role by being **co-assigned** for a day (or part of a day) with a specialty nurse?

a. ___ Yes
b. ___ No

If **Yes**, which type of specialty nurse?

c. ___ A diabetic teaching nurse
d. ___ A home care nurse
e. ___ An enterostomal nurse
f. ___ Other specialty nurses (list types below)

____

____

THEORY CONTENT OF THE AMBULATORY CARE EXPERIENCE

17. Other than when the students are completing the work assigned to meet the course behavioral objectives, what evidence have you seen that LBCC vocational nursing students are using **Orem's Self-Care Theory** of nursing?

YES NO
a. ___ ___ They use the term, "self-care," when speaking to you or other staff nurses, about the clients for whom they are caring.
b. ___ ___ They use the term, "self-care," when speaking to clients.
c. ___ ___ They incorporate self-care into their plan of care for the clients.
d. ___ ___ They teach clients ways to help themselves to recover from illness.
e. ___ ___ They teach clients ways to prevent illnesses.
f. ___ ___ They teach clients ways to develop a healthier life style.
g. ___ ___ They ask clients questions to evaluate whether the clients understand the concept of self-care, as contrasted with depending on health care workers to care for the clients' recovery or health.

h. Any other evidence? ______________________________

18. Presently, the two major elements of the ambulatory care course are (1) the behavioral objectives and (2) the client assessment and nursing care instruments. The behavioral objectives define how the assessment forms are to be used by the students. The instruments guide the students in applying nursing concepts to ambulatory nursing practice. Please evaluate these **instruments** for their usefulness in helping students apply nursing concepts to practice as: Excellent (E), Satisfactory (S), or Useless (U).

E S U
a. ___ ___ ___ Quick Adult Assessment
b. ___ ___ ___ Self-Care History and Action Plan
c. ___ ___ ___ Nursing Physical Assessment
d. ___ ___ ___ Nutrition Profile and Teaching Plan
e. ___ ___ ___ Drug Profile
f. ___ ___ ___ Range of Motion and Muscle Strength Assessment

19. Is the **balance** between the assignments and the actual practice of ambulatory care appropriate? Please explain any NO answers.

YES NO
a. ___ ___ The **number** of learning assignments fits an assignment with 2 days of orientation and 10 days of clinical during 4 weeks.
b. ___ ___ 10 Quick Adult Assessments are appropriate (1 per day after orientation).
c. ___ ___ 3 Self-Care History and Action Plans (1 per week after the first week).
d. ___ ___ 3 Nursing Physical Assessments (1 per week after the first week).
e. ___ ___ 3 Nutrition Profile and Teaching Plans (1 per week after the first week).
f. ___ ___ 3 Drug Profiles (1 per week after the first week).
g. ___ ___ 3 Range of Motion and Muscle Strength Assessments (1 per week after the first week).

Explanation of NO answers ____

____

YES NO
h. ___ ___ The **time** balance between learning assignments and practice is correct
i. ___ ___ Excessive **time** is spent on learning assignments
j. ___ ___ Insufficient **time** is spent on learning assignments
k. If the **time** spent on learning assignments is unacceptable, what should be eliminated

or changed? ____

____

YES NO
l. ___ ___ The **depth** of learning assignments is suitable
m. ___ ___ Learning assignments are too complex
n. ___ ___ Learning assignments are too simple
o. If the **depth** of learning assignments is inappropriate, what should be made more

complex or simplified? ____

____

Thank you for agreeing to be interviewed. Your comments will be helpful in understanding the future for vocational nursing in ambulatory care.

APPENDIX D

LONG BEACH CITY COLLEGE STUDENTS' EVALUATION OF THE AMBULATORY CARE LEARNING PROJECTS

LONG BEACH CITY COLLEGE STUDENTS' EVALUATION OF THE AMBULATORY CARE LEARNING PROJECTS

I, Faye Gregory, am conducting this survey as part of my doctoral studies. The purpose of this questionnaire is to evaluate the effectiveness of the Long Beach City College ambulatory care learning projects in guiding your learning in the clinical area. This information will assist both the nursing education program and the ambulatory care facility to better plan for student learning and evaluation. To protect the confidentiality of your answers, please do not put your name on the survey.

In the next column, fill in the circle next to the answer that corresponds to your situation.

EXAMPLE:

○ Another answer
○ Your choice

Your help in this project is appreciated. Thank you for your participation. After you finish this part of the survey, please turn the page and follow the directions there to complete the survey.

1. The agency to which you were assigned

○ FHP Charter
○ FHP Downey
○ FHP Plaza
○ FHP Long Beach
○ Harriman Jones
○ Long Beach Comprehensive Health Care
○ Other ____________________________

2. Your ethnic background?

○ Asian
○ Black
○ Hispanic
○ White
○ Other

3. Your age?

○ 20-25
○ 26-30
○ 31-35
○ 36-40
○ 41-45
○ 46-50
○ 51-55
○ 56-60

4. Your sex?

○ Female
○ Male

5. Previous work experience in ambulatory care?

○ Yes, how long? _____ months
○ No

LONG BEACH CITY COLLEGE STUDENTS' EVALUATION OF THE AMBULATORY CARE LEARNING PROJECTS

Using the following scale:

0
1-25%
26-50%
51-75%
76-100%

fill in the circle under the answer that corresponds to your situation or fill in the blank.

0%	1-25%	26-50%	51-75%	75-100%	
○	○	○	○	○	EXAMPLE: You could remember all of the information on a form.

0%	1-25%	26-50%	51-75%	75-100%	QUICK ADULT ASSESSMENTS-yellow
○	○	○	○	○	6. How many of the 10 Quick Adult Assessments (QAA) did you complete? ______
○	○	○	○	○	7. What percent of the information on a QAA could you remember to assess without using the form?
○	○	○	○	○	8. The maximum time for the QAA, including taking vital signs, doing the assessment, and completing the form is 15 minutes. What percent of the QAA could you now complete in 15 minutes? If it takes more than 15 minutes, how many more minutes do you need? ____
○	○	○	○	○	9. What percent of the QAA related to Orem's Self-Care Deficit Theory of Nursing?
○	○	○	○	○	10. How much of the information on the QAA would be useful to you in helping the client to develop a healthier life style?
○	○	○	○	○	11. As a graduate, with what percent of clients could you have taken the time to help develop a healthier life style by completing a QAA?

0%	1- 25%	26- 50%	51- 75%	75- 100%	SELF-CARE HISTORY & ACTION PLAN-pink
○	○	○	○	○	12. How many of the 3 required Self-Care History and Action Plans (SCH) did you complete? ____
○	○	○	○	○	13. What percent of the 8 major categories on the SCH could you remember to assess without using the form?
○	○	○	○	○	14. The maximum time to do a SCH is 30 minutes. What percent of the SCH could you now complete in 30 minutes? If it takes more than 30 minutes, how many more minutes do you need? ______
○	○	○	○	○	15. What percent of the SCH related to Orem's Self-Care Deficit Theory of Nursing?
○	○	○	○	○	16. How much of the information on the SCH would be useful to you in helping the client to develop a healthier life style?
○	○	○	○	○	17. As a graduate, with what percent of clients could you have taken the time to help develop a healthier life style by completing a SCH?

0%	1- 25%	26- 50%	51- 75%	75- 100%	NURSING PHYSICAL ASSESSMENT-gold
○	○	○	○	○	18. How many of the 3 required Nursing Physical Assessments (NPA) did you complete? __
○	○	○	○	○	19. What percent of the information on a NPA could you remember to assess without using the form?
○	○	○	○	○	20. The maximum time for the NPA is 30 minutes. What percent of the NPA could you now complete in 30 minutes? If it takes more than 30 minutes, how many more minutes do you need? _____
○	○	○	○	○	21. What percent of the NPA related to Orem's Self-Care Deficit Theory of Nursing?
○	○	○	○	○	22. How much of the information on the NPA would be useful to you in helping the client to develop a healthier life style?
○	○	○	○	○	23. As a graduate, with what percent of clients could you have taken the time to help develop a healthier life style by completing a NPA?

0%	1-25%	26-50%	51-75%	75-100%	DRUG PROFILE-blue
○	○	○	○	○	24. How many of the 3 required Drug Profiles (DP) did you complete? ______
○	○	○	○	○	25. What percent of the DP could you remember to assess without using the form?
○	○	○	○	○	26. The maximum time to do a DP is 20 minutes. What percent of the DP could you now complete in 20 minutes? If it takes more than 20 minutes, how many more minutes do you need? ______
○	○	○	○	○	27. What percentage of the DP related to Orem's Self-Care Deficit Theory of Nursing?
○	○	○	○	○	28. How much of the information on the DP would be useful to you in helping the client to develop a healthier life style?
○	○	○	○	○	29. As a graduate, with what percent of clients could you have taken the time to help develop a healthier life style by completing a DP?

0%	1-25%	26-50%	51-75%	75-100%	NUTRITION PROFILE-green
○	○	○	○	○	30. How many of the 3 Nutrition Profiles (NP) did you complete? ______
○	○	○	○	○	31. What percent of the major categories on the NP could you remember to assess without using the form?
○	○	○	○	○	32. The maximum time to do a NP is 20 minutes. What percent of the NP could you now complete in 20 minutes? If it takes more than 20 minutes, how more than 20 minutes, how many more minutes do you need? ______
○	○	○	○	○	33. What percent of the NP related to Orem's Self-Care Deficit Theory of Nursing?
○	○	○	○	○	34. How much of the information on the NP would be useful to you in helping the client to develop a healthier life style?
○	○	○	○	○	35. As a graduate, with what percent of clients could you have taken the time to help develop a healthier life style by completing a NP?

RANGE OF MOTION AND MUSCLE STRENGTH ASSESSMENT-buff

0%	1-25%	26-50%	51-75%	75-100%	
○	○	○	○	○	36. How many of the 3 Range of Motion and Muscle Strength Assessments (ROM) did you complete? ______________
○	○	○	○	○	37. What percent of the major categories on the ROM could you remember to assess without using the form?
○	○	○	○	○	38. The maximum time for the ROM is 30 minutes. What percent of the ROM could you now complete in 30 minutes? If it takes more than 30 minutes, how many more minutes do you need? ______
○	○	○	○	○	39. What percent of the ROM related to Orem's Self-Care Deficit Theory of Nursing?
○	○	○	○	○	40. How much of the information on the ROM would be useful to you in helping the client to develop a healthier life style?
○	○	○	○	○	41. As a graduate, with what percent of clients could you have taken the time to help develop a healthier life style by completing a ROM?

APPENDIX E

STAFF NURSES' EVALUATION OF THEIR NURSING SCHOOL'S AMBULATORY CARE CLINICAL EXPERIENCE

STAFF NURSES' EVALUATION OF THEIR NURSING SCHOOL'S AMBULATORY CARE CLINICAL EXPERIENCE

My name is Faye Gregory. This survey is part of my doctoral studies. The information will help me plan for student learning in your ambulatory care agencies. To protect the confidentiality of your answers, please do not put your name on the survey.

To answer the questions, fill in the circle next to the answer that corresponds to your situation.

EXAMPLE:
○ Another answer
○ Your choice

The survey may look long but it will only take about 15 minutes. After you finish this part of the survey, please turn the page and follow the directions there to complete the survey.

1. Your agency's name
○ FHP Charter
○ FHP Downey
○ FHP Plaza
○ FHP Long Beach
○ Harriman Jones
○ Long Beach Comprehensive Health Care
○ Other ______________________

2. The primary area in which you work
○ Medical
○ Surgical
○ General (Med-Surg)
○ Other ______________________

3. Your worker category
○ MA
○ LVN
○ RN

4. Your length of service at this agency
○ Less than 6 months
○ 6 months to l year
○ 1 year to 2 years
○ 2 to 5 years
○ 5 to 10 years
○ More than 10 years

5. Your length of service in ambulatory care
○ Less than 6 months
○ 6 months to l year
○ 1 year to 2 years
○ 2 to 5 years
○ 5 to 10 years
○ More than 10 years

6. The amount of time since your graduation from your basic nursing school
○ Less than 6 months
○ 6 months to l year
○ 1 year to 2 years
○ 2 to 5 years
○ 5 to 10 years
○ More than 10 years

7. Your age
○ 20-25
○ 26-30
○ 31-35
○ 36-40
○ 41-45
○ 46-50
○ 51-55
○ 56+

STAFF NURSES' EVALUATION OF THEIR NURSING SCHOOL'S AMBULATORY CARE CLINICAL EXPERIENCE

The purpose of this questionnaire is to gather information about: (1) staff nurses' actual educational preparation for ambulatory nursing and (2) staff nurses' ideas about the kinds of educational experiences that would have been useful as preparation for ambulatory care nursing.

This part of the survey concerns information about your nursing education. Respond by filling in the circles.

8. Did you have a clinical experience in an ambulatory care facility?
   ○ Yes ○ No

If the answer is "NO," go to the directions on the next page.

9. Did you have a teacher directly supervising you in the clinical area?
   ○ Yes ○ No

10. Was the experience only an observation?
    ○ Yes ○ No

11. How long was the experience?
    ○ A. 1-4 days ○ C. 11-16 days
    ○ B. 5-10 days ○ D. More than 16 days

12. Approximately how many behavioral objectives were given you for the experience?
    ○ A. None ○ D. 11-15
    ○ B. 1-5 ○ E. More than 15
    ○ C. 6-10 ○ F. Do not remember

*****

DIRECTIONS FOR THE LAST PART OF THE SURVEY

Answer Part A and Part B of each question below, AS A WHOLE, by filling in the appropriate bubbles. If you did NOT receive instruction for the skill, leave part A blank.

After each question is a list of the components for that skill. If you practiced the skill as a whole, but did not practice one or more component(s), fill in the bubble for the "Items NOT practiced."

13A. How did you learn to perform an initial (5 minute) baseline assessment?
- ○ From a classroom theory presentation
- ○ In skills lab practice
- ○ Both

13B. Where did you practice with clients in performing an initial (5 minute) baseline assessment?
- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ I did NOT practice this skill, but it would have been helpful to have practiced it in school.
- ○ I did NOT practice this skill, and it would NOT have been helpful to have practiced it in school.

A baseline assessment includes:	Items I did NOT practice
1) observing the client for visible signs of pathology	○
2) asking the client to relate his symptoms	○
3) selecting the significant assessment(s)	○
4) differentiating between an assessment that requires a nursing action or a medical action	○
5) if a nursing action is needed, determining what nursing action should occur	○
6) preparing the client for the doctor's examination	○

14A. How did you learn to teach a client?
- ○ From a classroom theory presentation
- ○ In skills lab practice
- ○ Both

14B. Where did you practice teaching clients?
- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ I did NOT practice this skill, but it would have been helpful to have practiced it in school.
- ○ I did NOT practice this skill, and it would NOT have been helpful to have practiced it in school.

Client teaching includes:	Items I did NOT practice
7) determining the client's knowledge of a health related subject	○
8) teaching a health related subject to the client	○
9) determining what the client understood	○

15A. How did you learn to take a nursing history?
- ○ From a classroom theory presentation
- ○ In skills lab practice
- ○ Both

15B. Where did you practice with clients in taking a nursing history?
- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ I did NOT practice this skill, but it would have been helpful to have practiced it in school.
- ○ I did NOT practice this skill, and it would NOT have been helpful to have practiced it in school.

A nursing history includes asking questions about:	Items I did NOT practice
10) respiratory status (dyspnea, coughing)	○
11) nutritional status	○
12) excretory habits and hygiene	○
13) activity and rest	○
14) general comfort	○
15) quality of solitude and social interactions	○
16) the client's safety status	○
17) normalcy of self-concept	○
18) spiritual satisfaction	○

16A. How did you learn to perform a nursing physical assessment?
- ○ From a classroom theory presentation
- ○ In skills lab practice
- ○ Both

16B. Where did you practice with clients in doing a nursing physical assessment?
- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ I did NOT practice this skill, but it would have been helpful to have practiced it in school.
- ○ I did NOT practice this skill, and it would NOT have been helpful to have practiced it in school.

A nursing physical assessment includes:	Items I did NOT practice
19) asking the client his/her chief complaint	○
20) testing for distance vision with a Snellen chart	○
21) testing hearing with an audiometer	○
22) examining the mouth with a light and tongue blade	○
23) teaching a client to do a self-examination of her breasts	○
24) recognizing the presence of barrel chest	○
25) recognizing the presence of abnormal breath sounds	○
26) recognize the presence of abnormal heart sounds	○
27) palpating femoral and pedal pulses	○
28) estimating the amount of ankle edema	○
29) recognizing the absence of bowel sounds	○
30) evaluating basic mental status	○

17A. How did you learn to assess and teach about a normal healthy diet?

○ From a classroom theory presentation
○ In skills lab practice
○ Both

17B. Where did you practice with clients in assessing and teaching about a normal healthy diet?

○ In an ambulatory care facility.
○ In a hospital.
○ In both ambulatory care and hospital.
○ I did NOT practice this skill, but it would have been helpful to have practiced it in school.
○ I did NOT practice this skill, and it would NOT have been helpful to have practiced it in school.

Diet teaching includes:	Items I did NOT practice
31) eliciting information about daily foods eaten	○
32) sorting the client's daily foods into the Basic Four Food Groups	○
33) estimating the daily calories eaten and the deficiency or excess of calories	○
34) estimating the deficiency or excess of fluids drunk	○
35) assisting the client to modify his/her diet, if needed	○

18A. How did you learn to take a drug history and teach the client about his/her medications?

○ From a classroom theory presentation
○ In skills lab practice
○ Both

18B. Where did you practice with clients in taking a drug history and teaching the client about his/her medications?

○ In an ambulatory care facility.
○ In a hospital.
○ In both ambulatory care and hospital.
○ I did NOT practice this skill, but it would have been helpful to have practiced it in school.
○ I did NOT practice this skill, and it would NOT have been helpful to have practiced it in school.

Taking a drug history includes:	Items I did NOT practice
36) taking a history from the client about prescription and over-the-counter drugs	○
37) discussing problems about possible undesirable drug combinations with the physician	○
38) helping the client set up an appropriate schedule for taking his/her medications	○

19A. How did you learn to assess range of motion and muscle strength and teach the client appropriate exercises?
○ From a classroom theory presentation
○ In skills lab practice
○ Both

19B. Where did you practice with clients in assessing range of motion and muscle strength and teaching the client appropriate exercises?
○ In an ambulatory care facility.
○ In a hospital.
○ In both ambulatory care and hospital.
○ I did NOT practice this skill, but it would have been helpful to have practiced it in school.
○ I did NOT practice this skill, and it would NOT have been helpful to have practiced it in school.

Assessing range of motion and muscle strength, and teaching appropriate exercises includes:	Items I did NOT practice
39) estimating the degrees of flexion and extension of the major joints	○
40) evaluating the range of motion of the major joints	○
41) testing the bilateral muscle strength to assess for unilateral muscle weakness	○
42) testing for intact sensation in the extremities	○
43) with physician approval, teaching appropriate exercises to the client, to help improve range of motion and muscle strength	○

Your help in this project is appreciated. Thank you for your participation.

APPENDIX F

LBCC FACULTY EVALUATION OF THE STRUCTURE AND NURSING SKILLS IN AN AMBULATORY CARE CLINICAL EXPERIENCE

LBCC FACULTY EVALUATION OF THE STRUCTURE AND NURSING SKILLS IN AN AMBULATORY CARE CLINICAL EXPERIENCE

My name is Faye Gregory. I am conducting this survey as part of my doctoral studies. This information will help me plan for student learning in ambulatory care agencies. I will not reveal your name and will only use the answers as part of a statistical study. I do need to know your name in order to track the survey forms.

To answer the questions, fill in the circle next to the answer that corresponds to your situation.

EXAMPLE:
○ A. Another answer
○ B. Your choice

Your help in this project is appreciated. The survey may look long but it will only take about 15 minutes. Thank you for your participation. After you finish this part of the survey, please turn the page and follow the directions there to complete the survey.

1 Your name ____________________

2. Your highest level of educational preparation
○ AD RN
○ BSN
○ BS/BA in another area
○ MSN
○ MS/MA in another area
○ Doctorate

3. The primary area(s) in which you teach
○ Fundamentals
○ Medical Surgical
○ Obstetrics
○ Pediatrics
○ Gerontology
○ Ambulatory Care

4. Your length of service in teaching
○ Less than 6 months
○ 6 months to l year
○ 1 year to 2 years
○ 2 to 5 years
○ 5 to 10 years
○ More than 10 years

5. Your length of service at Long Beach City College
○ Less than 6 months
○ 6 months to l year
○ 1 year to 2 years
○ 2 to 5 years
○ 5 to 10 years
○ More than 10 years

6. Your length of service in ambulatory care
○ Less than 6 months
○ 6 months to l year
○ 1 year to 2 years
○ 2 to 5 years
○ 5 to 10 years
○ More than 10 years

7. The amount of time since your graduation from your basic nursing school
○ 2 to 5 years
○ 5 to 10 years
○ More than 10 years

8. Your age

○ 20-25	○ 41-45
○ 26-30	○ 46-50
○ 31-35	○ 51-55
○ 36-40	○ 56+

LBCC FACULTY EVALUATION OF THE STRUCTURE AND NURSING SKILLS IN AN AMBULATORY CARE CLINICAL EXPERIENCE

The purpose of this survey is to gather information about the structure of an ambulatory care clinical experience, and skills to be learned in ambulatory care facilities.

STRUCTURE OF AN AMBULATORY CARE CLINICAL EXPERIENCE

9. At LBCC, criteria for a student learning experience in an ambulatory care facility, without a full time teacher at the facility, are as follows. Rank the criteria as Essential (E), Supplementary (S), or Unnecessary (U). Please add any criteria you wish.

Criteria Related to the Behavioral Objectives

E S U

a. ___ ___ ___ The behavioral objectives are clear.

b. ___ ___ ___ The objectives detail all of the important expected behaviors for each day of the experience.

c. ___ ___ ___ The behavioral objectives require **practice** rather than initial learning experiences.

d. ___ ___ ___ The behavioral objectives require performance of routine nursing tasks (to teach reality).

e. ___ ___ ___ The behavioral objectives require challenging nursing tasks (to avoid boredom).

f. ___ ___ ___ The opportunities to meet the objectives are available in the agencies.

g. ___ ___ ____

Criteria Related to the Students

E S U

h. ___ ___ ___ The students have written copies of the required behavioral objectives.

i. ___ ___ ___ The students have enough experience that they can meet the behavioral objectives with minimal instructor support.

j. ___ ___ ___ The students are required to meet the behavioral objectives in order to complete the course.

k. ___ ___ ___ The students are provided with ways to record their daily progress in meeting the behavioral objectives.

l. ___ ___ ____

Criteria Related to the Agency

E S U

m. ___ ___ ___ The agency administration approves of and supports the school's objectives for the students.

n. ___ ___ ___ The staff is informed of the student behaviors required to complete the course requirements.

o. ___ ___ ___ The staff is able to perform the nursing skills required of the students (this sometimes requires in-service education by the instructor or agency).

p. ___ ___ ___ The staff is willing to facilitate the students' meeting of the behavioral objectives.

q. ___ ___ ___ The staff is willing to countersign the students' records to verify that the students have met the daily behavioral objectives.

r. ___ ___ ___ ____

Criteria Related to the Instructor

E S U

s. ___ ___ ___ Each week, the instructor talks with the charge nurse, to determine his/her assessment of the students' accomplishment of the behavioral objectives.

t. ___ ___ ___ Each week, the instructor talks with several of the staff nurses, to determine their assessment of the students' accomplishment of the behavioral objectives.

u. ___ ___ ___ Each week, the instructor talks with each student, to determine his/her accomplishment of the behavioral objectives.

v. ___ ___ ___ Each week, the instructor evaluates and records the students' accomplishment of the behavioral objectives.

w. ___ ___ ___ The instructor is willing to assess and resolve interpersonal problems between students and staff on a weekly basis.

x. ___ ___ ___ The instructor is willing to give guidance to the students to help them to meet the behavioral objectives.

y. ___ ___ ___ If needed, the instructor is willing to give brief individual instructions to the students to help them to meet the behavioral objectives.

z. ___ ___ ____

10. Currently, the LBCC ambulatory care clinical experience is structured as a hands-on, community health experience (board policy 3.3). An exemption has been given to the 54 hour limit, and the LBCC experience is scheduled for 108 hours. To determine your evaluation of the structure of the LBCC ambulatory care experience, please say whether you agree with the following statements:

YES NO

a. ___ ___ LBCC should continue to use the 108 hour exemption.

b. ___ ___ LBCC should consider decreasing the ambulatory care experience in community health agencies to ____ hours.

c. ___ ___ LBCC should continue to provide instructor support with visits to community heath agencies on a weekly basis.

d. ___ ___ LBCC should consider increasing instructor support by changing to _____ instructor visits per week.

e. ___ ____

f. ___ ____

SKILLS TO BE LEARNED IN AMBULATORY CARE FACILITIES

11. On the following list of LBCC ambulatory care nursing skills, rank the skills as Essential (E), Supplementary (S), or Unnecessary (U). Also, please add any skills you wish.

E S U
a. ___ ___ ___ Do an initial (5 minute) baseline assessment
b. ___ ___ ___ Pick out the significant observations

c. ___ ___ ___ Differentiate between an observation that requires a nursing action or a medical action
d. ___ ___ ___ Determine whether a significant observation requires a nursing action
e. ___ ___ ___ Prepare the client for the doctor's examination
f. ___ ___ ____

*****

E S U
g. ___ ___ ___ Determine the client's knowledge of a subject, before teaching is begun
h. ___ ___ ___ Teach a health related subject to a client
i. ___ ___ ___ Determine what the client understood

j. ___ ___ ____

*****

E S U Determine the questions to ask to assess:
k. ___ ___ ___ respiratory status
l. ___ ___ ___ nutritional status
m. ___ ___ ___ excretory habits and hygiene
n. ___ ___ ___ activity and rest
o. ___ ___ ___ general comfort
p. ___ ___ ___ quality of solitude and social interactions
q. ___ ___ ___ the client's safety status
r. ___ ___ ___ normalcy of self-concept
s. ___ ___ ___ spiritual satisfaction

t. ___ ___ ____

*****

E S U
u. ___ ___ ___ Ask the client his/her chief complaint
v. ___ ___ ___ Test for distance vision
w. ___ ___ ___ Test hearing with an audiometer
x. ___ ___ ___ Examine the mouth with a light and tongue blade
y. ___ ___ ___ Teach a client to do a self-examination of her breasts
z. ___ ___ ___ Recognize the presence of barrel chest
aa. ___ ___ ___ Recognize presence of abnormal breath sounds
bb. ___ ___ ___ Recognize presence of abnormal heart sounds
cc. ___ ___ ___ Palpate femoral and pedal pulses
dd. ___ ___ ___ Estimate the amount of dependent edema
ee. ___ ___ ___ Recognize absence of bowel sounds
ff. ___ ___ ___ Evaluate basic mental status

gg. ___ ___ ____

*****

E S U
hh. ___ ___ ___ Elicit information about daily foods eaten
ii. ___ ___ ___ Sort the client's daily foods into the Basic Four Food Groups
jj. ___ ___ ___ Estimate the daily calories eaten
kk. ___ ___ ___ Estimate the deficiency (or excess) of fluids drunk
ll. ___ ___ ___ Assist the client to modify his/her diet, if needed

mm. ___ ___ ____

*****

E S U
nn. ___ ___ ___ Take a history from the client about prescription and over-the-counter drugs
oo. ___ ___ ___ Discuss problems about possibly undesirable drug combinations with the physician
pp. ___ ___ ___ Help the client set up a schedule for taking his/her medications

qq. ___ ___ ____

*****

E S U
rr. ___ ___ ___ Estimate the degrees of flexion and extension of the major joints
ss. ___ ___ ___ Evaluate range of motion of the major joints
tt. ___ ___ ___ Test bilateral muscle strength to assess for unilateral muscle weakness
uu. ___ ___ ___ With physician approval, teach appropriate exercises to a client, to help ROM and muscle strength
vv. ___ ___ ___ Test for intact sensation in the extremities

ww. ___ ___ ____

*****

Your help in this project is appreciated. Thank you for your participation.

APPENDIX G

CALIFORNIA VOCATIONAL NURSING DIRECTOR'S REPORT OF THEIR PROGRAM'S EDUCATIONAL PREPARATION FOR AMBULATORY CARE NURSING

CALIFORNIA VOCATIONAL NURSING DIRECTORS' REPORT OF THEIR PROGRAM'S EDUCATIONAL PREPARATION FOR AMBULATORY CARE NURSING

My name is Faye Gregory. This survey is part of my doctoral studies. The information will assist me in determining what is current practice in California vocational nursing schools. I will not reveal your name or your school's name, and will only use the answers as part of a statistical study. I do need to know your name in order to track the survey forms.

To answer the questions, fill in the bubbles or blanks.

EXAMPLE:
○ A. Another answer
○ B. Your choice

The survey may look long but it will only take about 15 minutes. After you finish this part of the survey, please turn the page and follow the directions there to complete the survey.

1 Your name ____________________

2 Your title ____________________

3 Your school's name ______________

____

4 Your community
○ Large city
○ Medium city
○ Small town

5 Your type of program
○ Community College
○ Private School
○ Adult Education
○ ROP
○ Other ____________________

6 Your program's length
○ 1 year
○ 3 semesters
○ Other ____________________

7 Size of the class you admit?
○ 30 or fewer students
○ 31 to 45 students
○ 46 to 60 students
○ Other ____________________

8 How often do you admit classes?
○ Once a year
○ Twice a year
○ Other ____________________

9 The number of ambulatory (clinic) agencies in your community.
○ None
○ 1-5
○ 6-10
○ More than 10
○ Do not know

10 How many students, at one time, can be placed in how many ambulatory care facilities?
○ 1-3 in _____ agencies
○ 4-10 in _____ agencies
○ 12-15 in _____ agencies

11 Do you now have an ambulatory care experience?
○ Yes--how many days? _____
○ No
○ Planning one--how many days? _____

12 If permitted by regulations, would you schedule more than 54 hours of ambulatory care time?
○ Yes--how many more? _____
○ Already have more--how many more? _____
○ No

13 Do your students have a teacher with them full time for ambulatory care clinical?
○ Yes
○ No--how much time?

____

CALIFORNIA VOCATIONAL NURSING DIRECTORS' REPORT OF THEIR PROGRAM'S EDUCATIONAL PREPARATION FOR AMBULATORY CARE NURSING

The purpose of this survey is to determine WHERE and WHETHER you teach skills that are frequently used by graduates who practice in ambulatory care (clinic) settings.

DIRECTIONS

Answer Part A and Part B of each question below, AS A WHOLE, by filling in the appropriate bubbles. Mark only one bubble for each question

After each question is a list of the components for that skill. If you teach the skill as a whole, but do not teach one or more component(s), mark the bubble for that item under "Items we do NOT include."

14A. Where do students LEARN to do an initial (5 minute) baseline assessment?

○ In a classroom theory presentation
○ In a skills laboratory presentation
○ In both classroom and skills laboratory
○ In neither classroom nor skills laboratory

14B. Where do students PRACTICE with clients in doing an initial (5 minute) baseline assessment?

○ In an ambulatory care facility.
○ In a hospital.
○ In both ambulatory care and hospital.
○ Our students do NOT experience doing this skill with clients, but it would be helpful for our graduates to practice it in school.
○ Our students do NOT learn this skill, and it would NOT be helpful for our graduates to learn it in school.

A baseline assessment includes:	Items we do NOT include
1) observing the client for visible signs of pathology.	○
2) asking the client to relate his symptoms	○
3) selecting the significant assessment(s)	○
4) differentiating between an assessment that requires a nursing action or a medical action	○
5) if a nursing action is needed, determining what nursing action should occur	○
6) preparing the client for the doctor's examination	○

15A. Where do students LEARN to teach health concepts to a client?

- ○ In a classroom theory presentation
- ○ In a skills laboratory presentation
- ○ In both classroom and skills laboratory
- ○ In neither classroom nor skills laboratory

15B. Where do students PRACTICE teaching health concepts to a client?

- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ Our students do not practice this skill, but it would be helpful for graduates to learn it in school.
- ○ Our students do not practice this skill, and it would NOT be helpful for graduates to learn it in school.

Health teaching to a client includes:	Items we do NOT include
7) determining the client's knowledge of a health related subject?	○
8) teaching a health related subject to the client	○
9) determining what the client understood	○

16A. Where do students LEARN the questions to ask to take a nursing history?

- ○ In a classroom theory presentation
- ○ In a skills laboratory presentation
- ○ In both classroom and skills laboratory
- ○ In neither classroom nor skills laboratory

16B. Where do students PRACTICE taking a nursing history?

- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ Our students do not practice this skill, but it would be helpful for graduates to learn it in school.
- ○ Our students do not practice this skill, and it would NOT be helpful for graduates to learn it in school.

A nursing history includes asking questions about:	Items we do NOT include
10) respiratory status (dyspnea, coughing, SOB)	○
11) nutritional status	○
12) excretory habits and hygiene	○
13) activity and rest	○
14) general comfort	○
15) quality of solitude and social interactions	○
16) the client's safety status	○
17) normalcy of self-concept	○
18) spiritual satisfaction	○

17A. Where do students LEARN to perform a nursing physical assessment?

- ○ In a classroom theory presentation
- ○ In a skills laboratory presentation
- ○ In both classroom and skills laboratory
- ○ In neither classroom nor skills laboratory

17B. Where do students PRACTICE performing a nursing physical assessment?

- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ Our students do not practice this skill, but it would be helpful for graduates to learn it in school.
- ○ Our students do not practice this skill, and it would NOT be helpful for graduates to learn it in school.

A nursing physical includes:	Items we do NOT include
19) asking the client his/her chief complaint	○
20) testing for distance vision with a Snellen chart	○
21) testing hearing with an audiometer	○
22) examining the mouth with a light and tongue blade	○
23) teaching a client to do a self-examination of her breasts	○
24) recognizing the presence of barrel chest	○
25) recognizing the presence of abnormal breath sounds	○
26) recognize the presence of abnormal heart sounds	○
27) palpating femoral and pedal pulses	○
28) estimating the amount of ankle edema	○
29) recognizing the absence of bowel sounds	○
30) evaluating basic mental status	○

18A. Where do students LEARN to assess and teach about a normal healthy diet?

- ○ In a classroom theory presentation
- ○ In a skills laboratory presentation
- ○ In both classroom and skills laboratory
- ○ In neither classroom nor skills laboratory

18B. Where do students PRACTICE assessing and teaching about a normal healthy diet?

- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ Our students do not practice this skill, but it would be helpful for graduates to learn it in school.
- ○ Our students do not practice this skill, and it would NOT be helpful for graduates to learn it in school.

Diet teaching includes:	Items we do NOT include
31) eliciting information about daily foods eaten	○
32) sorting the client's daily foods into the Basic Four Food Groups	○
33) estimating daily calories eaten and deficiency or excess of calories	○
34) estimating the deficiency or excess of fluids drunk	○
35) assisting the client to modify his/her diet,if needed	○

19A. Where do students LEARN to take a drug history and teach the client about his/her medications?

- ○ In a classroom theory presentation
- ○ In a skills laboratory presentation
- ○ In both classroom and skills laboratory
- ○ In neither classroom nor skills laboratory

19B. Where do students PRACTICE taking a drug history and teaching the client about medications?

- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ Our students do not practice this skill, but it would be helpful for graduates to learn it in school.
- ○ Our students do not practice this skill, and it would NOT be helpful for graduates to learn it in school.

Taking a drug history includes: Items we do NOT include

36) taking a history about prescription and over-the-counter drugs .... ○
37) discussing problems about possible undesirable drug combinations with the physician .... ○
38) helping the client set up a schedule for taking his/her medications ..... ○

20A. Where do students LEARN to assess range of motion and muscle strength and teach the client appropriate exercises?

- ○ In a classroom theory presentation
- ○ In a skills laboratory presentation
- ○ In both classroom and skills laboratory
- ○ In neither classroom nor skills laboratory

20B. Where do students PRACTICE assessing range of motion and muscle strength and teach the client appropriate exercises?

- ○ In an ambulatory care facility.
- ○ In a hospital.
- ○ In both ambulatory care and hospital.
- ○ Our students do not practice this skill, but it would be helpful for graduates to learn it in school.
- ○ Our students do not practice this skill, and it would NOT be helpful for graduates to learn it in school.

Assessing range of motion and muscle strength, and teaching appropriate exercises includes: Items we do NOT include

39) estimating the degrees of flexion and extension of major joints .... ○
40) evaluating the range of motion of the major joints .... ○
41) testing bilateral muscle strength to assess for unilateral muscle weakness ○
42) testing for intact sensation in the extremities .... ○
43) with physician approval, teaching appropriate exercises to the client, to help improve range of motion and muscle strength .... ○

Your help in this project is appreciated. Thank you for your participation.

APPENDIX H

LBCC CURRICULUM STRUCTURE DOCUMENTS

Long Beach City College Vocational Nursing Program

PHILOSOPHY

June 1991

The Vocational Nursing Program is an integral part of Long Beach City College and operates in agreement with the general philosophy of the college. The college is "dedicated to providing high quality educational programs and related student services to those who can benefit from education. It is responsive to individuals and to the diverse needs of the local community" (Catalog, 1991-92:PO 1). The vocational nursing curriculum articulates with the curricula of both the Long Beach Regional Occupational Program for nursing assistants and the Long Beach City College registered nursing program. The Vocational Nursing Program is a certificate program and an area of concentration for an Associate Degree. The major objective of the Long Beach City College Vocational Nursing Program is to prepare students for licensure and competent practice as vocational nurses.

The faculty of the Vocational Nursing Program at Long Beach City College ascribes to the following beliefs.

Individuals have inherent worth and dignity and are free to realize their own potential. The individual considers his or her own behavior to be appropriate when viewed within the context of his or her own current value system. Behavior can be changed through education and guidance that modifies the individual's view of his or her value system.

Society has **major responsibilities for health activity that prevents illness** and provides basic care to those who are unable to care for themselves. **Individuals judge their own state of health and are personally responsible to seek assistance in preserving or restoring health based upon their assessment of their position along the continuum of health to illness.** Both individuals and society are responsible for the preservation of a balanced environment that uses and preserves natural resources for the continuation of a future healthy life on the planet.

Health is a state wherein an individual is structurally and functionally whole. **Both individuals and health care providers are making greater efforts toward health maintenance and illness prevention. Health care delivery is being modified by spiraling costs of care. Ambulatory or short term care is more often being used as the preferred method of health care delivery.** However, increasing longevity and technological improvements in health care have maintained the demand for both acute and chronic health care facilities.

"**Nursing** is the diagnosis and treatment of human responses to actual or potential health problems" (ANA, 1980). **Nursing actions focus on promoting client capacity and reducing limitations so that the most independent self-care becomes possible** (Orem, 1985:38). **The client and the nurse mutually set specific health care goals that include the resolution of physical, psychosocial, and spiritual needs. Goals are met through nursing care that is** "completely or partially compensatory or is **supportive-educative**" (Orem, 1985:152). The nursing process is a tool to determine clients' self-care abilities, limitations, and deficits; to establish health care goals based on nursing diagnoses; and to enable and evaluate clients' accomplishment of self-care or dependent care.

Vocational nursing education is the preparation of beginning level nurses who have the knowledge and skills to care for stable clients. These clients may be adults or children **who need** hospital, skilled nursing, or **ambulatory care for acute or chronic**

Illnesses. The California Vocational Practice Act (1987:92, 94) declares "the practice of licensed vocational nursing to be a profession," that is "practiced under the direction of a licensed physician, or registered professional nurse." Students may terminate their formal nursing education upon completion of the vocational nursing program, or may continue to higher levels of professional nursing education. In either case, they must have a strong foundation of basic nursing theory, skill in using the language of nursing to communicate with other health care workers, and socialization into the ethics, responsibilities, and privileges of professional client care. Basic knowledge in biological sciences, pathology, growth and development, and nutrition is a necessary foundation for nursing education. Simple nursing knowledge and nursing skills are the infrastructure for more complex nursing competencies. These nursing competencies include psychomotor and communication skills, rules and standards of practice, and a functional work ethic. **Instructors are responsible for providing explicit learning objectives**, clear explanations and demonstrations, practical learning experiences, and equitable evaluation. **Students are responsible for active involvement in the learning process, and for their own learning and nursing practice.**

Clients' simple and complex health care needs must be met adequately. Therefore, instructors make client care assignments so that beginning students give total care to one or two very stable clients needing only a few nursing interventions, or they collaborate with staff nurses to give partial care to clients needing more complex nursing care. As the students' knowledge and skills increase, assignments include more complex client care for more clients. Leadership skills are taught throughout the curriculum, as students first learn to guide the nursing care given by peers and later learn to direct the nursing care given by peers and staff persons.

References: *Long Beach City College Catalog*, 1991-92; *ANA Social Policy Statement*, 1980; Orem, Dorothea E., *Nursing Concepts of Practice*, 1985; *Vocational Nursing Practice Act, 1987.*

Long Beach City College Vocational Nursing Program

CURRICULUM OBJECTIVES*

December 1989

At the completion of the Vocational Nursing Program at Long Beach City College, the vocational nursing students will be able to:

1. Identify the physical and behavioral characteristics of clients of all ages, who have common health deviations, and recognize the unique characteristics of normal mothers and newborns, children, and older adults.

2. Apply knowledge of therapeutic communication techniques to interact with culturally diverse clients of all ages.

3. Apply basic knowledge and skills to implement the nursing process.

4. **Assess unmet universal self-care requisites, developmental self-care requisites, and health-deviation self-care requisites, collaborate in formulating nursing diagnoses, and writing nursing care plans for stable clients in ambulatory** and in-client care **facilities.**

5. **Identify priorities, plan, implement, and collaborate in the evaluation of nursing care that is** wholly or partly compensatory or **supportive-educative.**

6. Accurately report and record nursing care for multiple client assignments.

7. Consistently employ universal precautions.

8. Perform nursing skills with safety.

9. Prepare and administer medications (excluding intravenous medications) safely and efficiently.

10. **Teach clients and significant others self-care practices to maintain and promote optimum health.**

11. Exhibit proficiency as a health-team member and leader.

12. Demonstrate legal and ethical standards of nursing practice.

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* Derived from course documents approved by the Long Beach City College Board of Trustees

Long Beach City College Vocational Nursing Program

LBCC TAXONOMY OF NURSING DIAGNOSES

Based on Orem's Theory of Nursing

Selected NANDA Nursing Diagnoses Taught in the LBCC VN Curriculum

— SUFFICIENT INTAKE OF AIR —

1. Ineffective **AIRWAY** clearance
2. High risk for **ASPIRATION**
3. Ineffective **BREATHING** pattern

— SUFFICIENT INTAKE OF WATER —

4. High risk for **FLUID** volume deficit
5. **FLUID** volume deficit
6. **FLUID** volume excess

— SUFFICIENT INTAKE OF FOOD —

7. Altered **NUTRITION**: > required
8. Hi risk-altered **NUTRITION**: > required
9. Hi risk-altered **NUTRITION**: < required
10. Feeding **SELF-CARE** deficit
11. Impaired **SWALLOWING**

— ADEQUATE ELIMINATION —

12. **BOWEL** incontinence
13. **CONSTIPATION**
14. **DIARRHEA**
15. Toileting **SELF-CARE** deficit
16. Functional **URINARY** incontinence
17. Total **URINARY** incontinence
18. **URINARY** retention

— BALANCED ACTIVITY & REST —

19. High risk for **ACTIVITY** intolerance
20. **ACTIVITY** intolerance
21. **DIVERSIONAL** activity deficit
22. **FATIGUE**
23. Impaired physical **MOBILITY**
24. [Acute] **PAIN**
25. Chronic **PAIN**
26. Bathing/Hygiene **SELF-CARE** deficit
27. Drsg/Grooming **SELF-CARE** deficit
28. **SLEEP** pattern disturbance

— BALANCED SOLITUDE & SOCIAL INTERACTION —

29. Impaired verbal **COMMUNICATION**
30. Altered **FAMILY** processes
31. Impaired **SOCIAL** interaction
32. **SOCIAL** isolation

— PREVENTION OF HAZARDS —

33. Hi risk-altered **BODY TEMPERATURE**
34. High risk for **INFECTION**

35* High risk for **INJURY**

36. Altered **ORAL MUCOUS MEMBRANE**

37** High risk for **POISONING**

38* Auditory **SENSORY/PERCEPTUAL** alterat'n

39* Visual **SENSORY/PERCEPTUAL** alterat'n

40. Hi risk-impaired **SKIN** integrity
41. Impaired **SKIN** integrity

— NORMALCY & SPIRITUAL INTEGRITY —

42* **ANXIETY**

43. **BODY IMAGE** disturbance

44** Effective **BREAST FEEDING** potn enhanced

45** Ineffective **BREAST FEEDING**

46* Inef individual **COPING**

47* **FEAR**

48** Altered **GROWTH** and development

49* **HOPELESSNESS**

50. **KNOWLEDGE** deficit-specify

51** Hi risk-altered **PARENTING**

52** Altered **PARENTING**

53* Altered **THOUGHT** processes

54* **SPIRITUAL** distress

— PROMOTION OF HEALTH —

55. Altered **HEALTH** maintenance

56** **HEALTH** seeking behavior

*Mental Health

**Third Semester

NANDA 1990, OREM 1991:126

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APPENDIX I

STUDENT LEARNING TOOLS

DEVELOPMENTAL
LEVELS:
OLDER ADULT

CLINICAL LABORATORY INFORMATION

Faye Gregory
VN 289C

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Long Beach City College Vocational Nursing Program
Developmental Levels: Older Adult, VN 289C

CLASS SCHEDULE: Thursdays, 8:00-12:00, Room C 201

Wk	Date	Class Topic	Clinical Correlation	Assign-ment
1	3/19	Introduction to the course Leadership and management	Survey of the laboratory manual*	See objectives
2	3/26	Leadership and management, cont. Introduction to assessment	Quick Adult Assessment	
3	4/2	Review of growth and development		
4	4/9	Universal self-care requisites Assessment of social and family function Elder abuse and other legal aspects Assessment of mental status, functional independence	Self-Care History and Action Plan (Review from Common Mental Health Problems)	See objectives Ch. 1-4, Ch 11
5	4/16	Mid-term examination Assessment of the integument Assessment of the musculoskeletal system and feet	Range of Motion and Muscle Strength Assessment and Plan	Ch 5 Ch 14, 15
	4/23	Spring Break		
6	4/30	Assessment of the cardiovascular-renal system Assessment of the respiratory system	Nursing Physical Assessment	Ch 6, 12 Ch 7
7	5/7	Assessment of the gastrointestinal system and nutritional status Assessment of the nervous system	Nutrition Profile and Teaching Plan	Ch 8-9 Ch 10
8	5/14	Geriatric pharmacology Chronic illness, death and dying Gerontological nursing	Drug Profile	See objectives Own research
9	5/21	Final Examination		

* This chart includes only ambulatory care clinical correlation; hospital correlation has been omitted.

You should respond to the objectives as briefly as possible, on the syllabus page. If you need more room, add pages to the syllabus page. All of the sets of objectives for one day's assignment must be stapled together. Your name and date must be in the top right-hand corner of the first page. If you are absent, bring in the completed objectives the following week, marked with the date they were DUE, to earn half credit.
Class time will be spent discussing the objectives or participating in experiences to clarify and highlight the content of the assigned chapters and the objectives. You are responsible for all of the content covered by the objectives and the text. Class discussion will not necessarily cover each objective. SCHD289C.292

Long Beach City College—Vocational Nursing Program
OLDER ADULT AMBULATORY CARE—CLINICAL BEHAVIORAL OBJECTIVES

Use the following learning tools for recording the information for behavioral objectives 1 through 6. **Before implementing any of the plans developed in the learning tools you must have the diagnosis and plan signed by your co-assigned nurse if s/he is an RN or by his/her supervisor if s/he is not an RN.**

Each day following the campus laboratory and orientation day for a total of ten do BO 1, one **Quick Baseline Assessment** (yellow)

Each week during the second, third, and fourth weeks for a total of three of each, do
BO 2, one **Self-Care History** (pink)
BO 3, one **Nursing Physical Assessment** (gold)
BO 4, one **Self-Care Management of Medications** (green)
BO 5, one **Self-Care Management of Diet** (blue)
BO 6, one **Self-Care Management of Exercise** (buff).

Each week have the completed assessment forms and the **Older Adult Ambulatory Care—Clinical Evaluation** form ready for the instructor to check when she comes to visit the facility.

1. By the end of the clinical experience, routinely do a **Quick Baseline Assessment** (QBA) on *every* client you encounter. The QBA includes three nursing behaviors: a Quick Assessment, a Quick Nursing Care Plan, and a Quick Teaching Plan.

   Write ten QBAs and have them verified and signed by your co-assigned staff person. Use the yellow forms, **Quick Baseline Assessment**, in the laboratory manual. Indicate both presence and absence of client data. Each day continue this behavior either as a mental or as an written process with all the clients with whom you interact.

   a. The Heading of a QBA includes the date, the client's initials, age, the medical diagnosis and the date of its onset, the reason for contact, and the vital signs.

   b. The Quick Baseline Assessment is to be done in five minutes or less and is an observation of the client's visible self-care status. First the client is observed sitting in the waiting room. Next the client is observed while walking to the examining room. The final observation is made while you are taking the vital signs. The assessment must include physical features, mental functioning, and psychosocial behaviors.

   c. The Quick Nursing Care Plan is the decision/planning/intervention component of a QBA. The Quick Nursing Care Plan is the nurse's mental (or written) behavior of determining which observations require a nursing action, putting them in rank order of importance, deciding what the nursing action(s) should be, when they should be implemented, and implementing the action(s). Nursing actions may be categorized under the headings of "reporting," "doing," or "teaching."

   d. The Quick Teaching Plan is a two minute lesson related to one significant nursing observation. The observation must indicate a client's need for health teaching or the client's physical or emotional pathology. The need for teaching or the pathology must be identified, the subject for the lesson selected, and taught. The teaching must include an assessment of the client's knowledge about the subject, transmittal of the information, and evaluation of the client's understanding of the information.

2. Collect the data for and *write* three **Self-Care Histories** (S-CHx) on clients chosen by you, *consented to by the client* himself/herself, and approved and signed by your co-assigned staff person. Use the pink forms in the laboratory manual. The first self-care history must be completed in one half hour or less. The

next one must be completed in twenty minutes or less and the last one must be completed in fifteen minutes or less.

3. Collect the data for and *write* three **Nursing Physical Assessments** (NPA) on clients chosen by you, *consented to by the client* himself/herself, and approved and signed by your co-assigned staff person. Use the gold forms in the laboratory manual. The first physical assessment must be completed in one half hour or less. The next one must be completed in twenty minutes or less and the last one must be completed in fifteen minutes or less.

4. *Write* a **Self-Care Management of Medications** (S-CMM) for at least three clients who are taking three or more drugs. Use the green forms in the laboratory manual. Plan to collect data for the S-CMMs in 20 minutes or less.
   a. List the generic name, trade name, descriptor, dose, frequency, and administration of each prescription and OTC drug and the reason each drug is being taken by this client.
   b. Determine whether there is a likelihood of undesirable drug interactions by comparing the list of effects and side effects for each drug (do this as home work with appropriate drug references) and list the desirable and undesirable drug interactions.
   c. Discuss the drug regime for each of these clients with your co-assigned staff person to determine whether any of the possible interactions should be reported to the physician. Have the co-assigned staff person sign your papers. Get suggestions from the physician and list any actions you took based on the data you collected.

5. For at least three clients *write* a **Self-Care Management of Diet** (S-CMD). Use the blue forms in the laboratory manual. Plan to collect data for the S-CMDs in 20 minutes or less. Include the kinds and amounts of food usually eaten, an assessment of the condition of the mouth and teeth, height, weight, skin condition, bowel habits, use of vitamins and/or food supplements, knowledge, of nutrition, and eating habits. After gathering the data write a teaching plan for one nutrition lesson for each client, have it approved and signed by the co-assigned staff person, and implement the plan on the client's next visit.

6. For at least three clients who have *no overt musculoskeletal pathology* assess and *record* the client's range of motion and muscle strength on the **Self-Care Management of Exercise** (S-CME). Use the buff forms in the laboratory manual. Plan to collect the data for the S-CME in 20 minutes or less. Choose a physical exercise suggested to promote wellness and self-care, write a plan to help the client improve his/her muscle strength and/or range, have it approved and signed by your co-assigned staff person and/or physician and implement the plan. The physician must approve a plan for aerobic exercises.

7. Use your **Ambulatory Skills Tests** and each week arrange to have yourself tested by your co-assigned staff person to verify your clinical skills. Use clients who are available, who need the nursing interventions, and who have agreed to participate in your learning experience. You need to pace yourself so that you have been tested on all twenty-seven skills by the end of the ambulatory care clinical experience. You do not have to have the same staff person evaluate you for all the skills but you should select from the available staff the person with the highest skill level to ensure accurate evaluation of your skills. Each week have your skills manual and the **Older Adult Ambulatory Care—Clinical Evaluation** form ready for your instructor to check when she comes to visit the facility

8. At the end of the rotation demonstrate application of the clinical behavioral objectives by writing a three-page paper. The title of the paper is **Summary of My Older Adult Ambulatory Care Experience.** In your summary describe your clinical experience and evaluate your personal learning accomplishments related to each of the clinical behavioral objectives for the older adult ambulatory care experience.

9. On the last clinical day give your instructor (1) completed assessment forms, (2) completed skills tests, (3) a written summary of the older adult ambulatory care experience, and (4) the clinical evaluation form.

LONG BEACH CITY COLLEGE—VOCATIONAL NURSING PROGRAM
OLDER ADULT AMBULATORY CARE—CLINICAL EVALUATION

Student's Name ______________________ Dates of the Experience ______________________

Name of the Facility ______________________ Dates Absent ______________________

Assessment projects are equal to 50 % of the clinical grade. Instructor gives grade points. POINTS

1. 10-Quick Adult Assessments
   Up to 1 point each; max 10 ______

Students place the date of project completion in each blank	DATE	DATE	DATE	POINTS
2. 3-Self-Care Histories Up to 2 points for #1; 3 points for #2 and #3; max 8	______	______	______	______
3. 3-Nursing Physical Assessments Up to 2 points for #1; 3 points for #2 and #3; max 8	______	______	______	______
4. 3-Self-Care Management of Medications Up to 2 points for #1; 3 points for #2 and #3; max 8	______	______	______	______
5. 3-Self-Care Management of Diet Up to 2 points for #1; 3 points for #2 and #3; max 8	______	______	______	______
6. 3-Self-Care Management of Exercise Up to 2 points for #1; 3 points for #2 and #3; max 8	______	______	______	______
7. 1-Summary, "My Older Adult Ambulatory Care Experience" Up to 10 points, up to 10 % of the clinical grade	______			______
8. 1-Set of completed Ambulatory Skills Tests Up to 40 points, up to 40% of the clinical grade	______			______
			TOTAL	______

Ambulatory Skills Tests					
1. Interview: reason for contact, and goal (3)		10. Height (1)		19. Specimen from a wound (1)	
2. Determine a nursing diagnosis (3)		11. Weight (1)		20. Clean catch specimen (1)	
3. Develop a nursing care plan (3)		12. Evaluate vision (1)		21. Papanicolaou Smear (1)	
4. Nursing care plan (3)		13. Screen hearing (1)		22. Intramuscular injection (1)	
5. Temperature (1)		14. Assess cardiac status (2)		23. Z-track injection (1)	
6. Apical pulse (1)		15. Assess lung status (2)		24. Subcutaneous injection (1)	
7. Apical with radial pulse (1)		16. Assess neurological status (2)		25. Intradermal injection (1)	
8. Respirations (1)		17. Specimen from nasopharynx (1)		26. Sterile dressing (2)	
9. Blood pressure (1)		18. Specimen from the throat (1)		27. Health teaching (2)	

Maximum points for each skill are in parenthesis

Criteria for evaluation:

Excellent: Participated enthusiastically, attended all 12 days, completed 100 % of the projects.
Satisfactory: Participated actively, attended 11 days, and completed 80 % of the projects
Marginal: Participated minimally, or attended 9 or 10 days, or completed 75 % of the projects
Unsatisfactory: Participated very little, or attended fewer than 9* days, or completed fewer than 75 % of the projects

Student ______________________ Date ______________________

Evaluator ______________________ Grade ______________________

* Teacher prerogative may be invoked for serious illness.

CLINEVAL.892

Long Beach City College Vocational Nursing Program
QUICK BASELINE ASSESSMENT

BASIC CONDITIONING FACTORS

Student's name ______________ Date __________ Co-assigned's signature ______________

Reason for contact ______________

Client's initials ___ Age ___ Sex___ Medical dx ______________

Weight _____ Reported height _____ Primary language ______________

T/P/R/BP ______________

Orem's Universal Self-Care Requisites: 1. AIR 2. WATER 3. FOOD 4. ELIMINATION 5. SOCIAL INTERACTION/SOLITUDE 6. ACTIVITY/REST 7. SAFETY 8. NORMALCY: 8a. Physical Integrity 8b. Psychological Integrity 8c. Development

NORMALCY: Physical Integrity

Body config ___ Average
___ Short ___ Tall
___ Unusual features
____

Eyes ___ Clear
___ Red ___ Tearing
___ Swollen ___ Crusted

Pupils ___ Normal
___ Pinpoint ___ Dilated

Vision ___ Normal for distance
___ Impaired ___ Blind

Hearing ___ Normal
___ Impaired ___ Deaf

Skin ___ Clear
___ Blemishes ___ Rash
____
Color ______________

Lips ___ Smooth ___ Dry
___ Cracked ___ Cracked corners

Hands ___ Clean
___ Dirty ___ Skin cracked
___ Skin blemishes
____
___ Nails cared for
___ Hangnails ___ Nails neglected
___ Tobacco stains
___ Joints enlarged
___ Joints painful
___ Tremor
____

NORMALCY: Psychological Integrity

Mental status ___ Alert
___ Out of contact
___ Oriented: time-place-person
___ Follows 1, 2, 3, directions (circle which)

Affect ___ Happy ___ Neutral
___ Sad ___ Angry
___ Apathetic ___ Afraid
___ Anxious

NORMALCY: Development

___ Normal ___ Delayed

Stage ___ Young Adult
___ Middle Aged Adult
___ Older Adult
___ Old Old Adult

SOCIAL INTERACTION/SOLITUDE

Speech ___ Understandable
___ Distorted: slurred, slow, fast, loud, soft, ______________

Dress ___ Appropriate
___ Odor______________
___ Extreme style
___ Dirty
___ Unkempt
___ Too many layers

Hair ___ Shiny
___ Dull
____

Relationships ___ Positive ___ Neutral
___ Troubled
Caretaker: ______________

ACTIVITY/REST

Posture ___ Upright, straight
___ Stooped
____

Movement ___ Ok arising from chair
___ Slow arising
___ Ok sitting down
___ Slow sitting

Mobility ___ Smooth stride
___ Limping ___ L ___ R
___ Slow ___ Painful
___ Appliance(s) ______________

Feet ___ Ok
___ Swollen ___ Painful

SAFETY

___ No accident hx
___ Accident prone hx

AIR

Nose ___ Clear
___ Draining ___ Congested

Breath ___ No odor
___ Foul ___ Short of breath
___ Coughing ___ Wheezing
___ Alcohol ___ Smoke

WATER

___ Mucous membranes moist
___ Mucous membranes dry
___ Good skin turgor
___ Poor skin turgor

Reported intake:
Glasses ___ x 8 oz = ________
Cups ___ x 6 oz = ________

FOOD

___ Underweight ___ Overweight

Teeth ___ Teeth clean ___ Missing teeth
___ Dentures ___ Edentulous
___ Unbrushed ___ Inflamed gums

ELIMINATION

___ # Bowel movements/day
___ # Voidings/day

OTHER SIGNIFICANT FINDINGS ______________
____
____
____
____

Quick Nursing Care Plan

Significant observation	Nursing action req. Yes/No	Rank of yes answers	Immediate intervention	Follow up Yes/No

Quick Teaching Plan

a. The significant observation ______________
b. The client's need (check which) 1) ___ Health teaching 2) ___ Disease related care ______________
c. The subject of instruction ______________
d. The caretaker/client's knowledge of the subject ______________
e. Method(s) of information transmittal (check which) 1) ___ Verbal 2) ___ Written 3) ___ Demonstration
f. What the client understood ______________

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Long Beach City College Vocational Nursing Program
SELF-CARE HISTORY

BASIC CONDITIONING FACTORS

Student's name ________________________ Date _______ Co-Assigned's Signature ______________

Client's Initials ___ Age ___ Sex ___ Medical Dx ______________________ Reason for Contact ______________________

T/P/R/BP ____ Weight ______________ Reported Height ____

OREM'S UNIVERSAL LIFE DEMANDS

Assess each category. Put a check for yes, 0 for no, and X for refusal to answer or fill in an appropriate answer.

1. AIR: Ventilation and Circulation
   a. Orthopnea ____ b. Dyspnea ____ c. SOB ____ d. Wheezing ____ e. Coughing ____ f. Smoking: #/day ____ g. Can cough _____ h. Can raise secretions ___ h. Can dispose of secretions in a receptacle ___ i. Can swallow secretions ___ j. Can exchange enough air for normal activities ____ k. Chest pain ____ l. Bradycardia ____ m. Tachycardia ____ n. Arrhythmia ____ o. Edema ____ p. Leg cramping ____ q. Can stop chest pain by rest and still give self-care ____ r. Can stop leg pain by rest and still give self-care ____
2. WATER AND FOOD
   a. Amt daily fluids _________ (1500 ml) b. Amt daily alcohol _________ c. Vitamins _________ d. Special diet ______________
   e. Usual daily meal sequence ____
   f. Food Pyramid: (2-3 Milk) ____ (2-3 Meat) ____ (3-5 Vegetables) ____ (2-4 Fruits) ____ (1 Citrus) ____ (6-11 Bread, cereal) ____
   g. Amount overweight _____ h. Amount underweight _____ i. Can feed self _____ j. Can get an adequate diet ______________
3. EXCRETION and Hygiene
   a. Normal BM, frequency ___ b. Color of stool ___ c. Constipation, frequency ___ d. Straining ___ e. Hemorrhoids ___ f. Pain ____
   g. laxatives, frequency _______ h. Suppositories, frequency _______ i. Enemas, frequency _______ j. Diarrhea, frequency _______
   k. Colostomy ___ l. Incontinent of stool ___ m. Can care for bowel needs except for ______________________
   Frequency of urination: n. day _______ o. night _______ p. Color of urine ________ q. Burning _______ r. Urgency _______ t. Stress incontinence _____ u. Incontinence _____ v. Catheter _____ w. Can care for urinary needs except for: ______________
   x. Frequency of bath/shower ___ y. Frequency of shampoo ___ z. Frequency of clothes laundering ___, how/where ______________
4. ACTIVITY, REST, and General Comfort
   a. Occupation _______ b. Leisure activities ______________________ c. Hobbies/Interests ______________________
   Mobility: d. Upper extremities _____ e. Lower extremities _____ f. Use of appliance(s) ______________________
   g. Can get sufficient exercise _____ h. Chooses to get sufficient exercise _____ i. Insomnia, frequency _____ j. Hours of sleep _____
   k. Times of sleep ________ l. Sleep aids used ________ m. Can get sufficient sleep ___ n. Can get sufficient rest ___ o. % of time free of pain ___ p. # of activities limited by pain (list) ______________________
5. SOLITUDE AND SOCIAL INTERACTION
   a. Who is your "family"? ______________________ b. Social activities ______________ c. Organizations _______
   d. Solitary activities ______________ e. # female friends ___ f. # male friends ___ k. Able to tolerate solitude ___ l. # of persons with whom a satisfactory relationship is maintained ____ m. Social problems ______________________
6. SAFETY
   a. Describe your home ______________ b. Describe your economic status ______________________
   c. Kind of health insurance ______________ d. Major health problems ______________________
   e. Can maintain a safe environment ___, except for (list) ______________________
7. NORMALCY: Psychological Integrity
   a. Strength of self-concept: strong ___ weak ___ b. Emotional status: stable ___ unstable ___ c. General mood: happy ___ neutral ___ sad ___ d. Memory intact ___ e. Kinds of stressors ______________________
   f. Can maintain a normal self-concept ___, except for (list) ______________________
8. *SPIRITUAL SATISFACTION:*
   a. Are spiritual and/or religious things important to you? ___ If yes, how? ______________________
   b. Religious preference ______________ c. Active ____ d. Inactive ____ e. Are your personal standards similar to those of your community? ______________________
   f. Are your personal behaviors similar to those of your community? ______________________
   g. Are your behaviors toward others similar to those of your community? ______________________
   h. Do you have thoughts about death & dying? ___, (list) ______________________

Requisites to Meet Demands

From the 8 categories above, highlight the client's strengths and areas of potential risk, and list these strengths and risks under one of the three categories below.

1. Physical, mental, and socioeconomic abilities ______________________
2. Knowledge, experience, and skill ______________________
3. Desire and decision to take action ______________________

Client *can* meet self-care demands independently ____ Client *cannot* meet self-care demands independently ____

Need for Nursing Action

1. **Strengthen self-care capacity.** List the client's significant strengths (by number and letter, from above) and asterisk the one you think can be increased.
2. **Eliminate or minimize self-care limitation.** List the client's significant deficits (by number and letter, from above) and asterisk the one you think can be minimized.
3. **Act for, do for, or partially assist.** List, in the plan below, the thing(s) you or the client wish to do to help the client.

Plan of Action for Client and/or Nurse

From Eliopoulos,
Orem, and Gregory
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Long Beach City College Vocational Nursing Program

NURSING PHYSICAL ASSESSMENT

Orem's Universal Self-Care Requisites: 1. AIR 2. WATER 3. FOOD 4. ELIMINATION 5. SOCIAL INTERACTION/SOLITUDE 6. ACTIVITY/REST 7. SAFETY 8. NORMALCY: 8a. Physical Integrity 8b. Psychological Integrity 8c. Development

Skills tests are indicated by an asterisk (*)

NORMALCY: Physical Integrity

Eyes/Visual acuity (Snellen*) R eye ______ L eye ______

Left pupil

Equal	Round	Rct Lt	Rct Acmd

Right pupil

Equal	Round	Rct Lt	Rct Acmd

Ears/Hearing (Whisper test*) R ear ________ L ear ________

WATER AND FOOD: Nutrition Weight* ______ Height* ______

Mouth Examine with light and tongue blade Teeth ______________ Gums ______________ Throat______________

ACTIVITY AND REST: Range of Motion, Muscle Strength, and Sensation Evaluate range of motion of all major joints and test bilateral muscle strength. Follow the pattern on the SELF-CARE MAINTENANCE OF EXERCISE. Note any limitation, weakness, or lack of sensation.

NORMALCY: Psychological Integrity

Short Portable Mental Status Questionnaire** Ask the questions below to evaluate mental status.

1. What is the date today (month/day/year)? ______________
2. What day of the week is it? ______________
3. What is the name of this place? ______________
4. What is your telephone number? ______________
   (If no phone, ask for address) ______________
5. How old are you? ______________
6. When were you born (month/day/year)______________
7. Who is the current president of the United States? ______________
8. Who was the president just before him? ______________
9. What was your mother's maiden name? ______________
10. Subtract three from 20 and keep subtracting three from each new number you get, all the way down. ______________

0-2 errors=intact; 3-4 errors=mild intellectual impairment; 5-7 errors=moderate impairment; 8-10 errors=severe impairment

Allow one more error if subject had only grade school education. Allow one fewer error if subject has had education beyond high school.

**Duke University Center for the Study of Aging: Multidimensional Functions Assessment: The OARS Methodology, 1978.

HAVE THE CLIENT UNDRESS FOR THE REMAINDER OF THE EXAMINATION

AIR: Ventilation and Circulation

Chest Note increased AP (anterior posterior) diameter ______________ Resp Rate ______________

Lungs* Listen over anterior and posterior lobes for abnormal sounds: rales-small crackles made by alveoli popping open; rhonchi-loud musical sounds made by air over strands of mucus that clear or change with coughing; wheezes and friction rubs.

____

Heart* Listen at PMI (point of maximal impulse) and 2nd ICS (intercostal space) for tachycardia, bradycardia, irregular rate, and extra sounds

____

Palpate femoral and pedal pulses, and evaluate any edema

Apical pulse _____ Femoral pulses R _____ L _____ Pedal pulses R _____ L _____ Dependent edema 0-4+ __________

WATER AND FOOD: Nutrition, continued Abdomen: Listen for bowel sounds in all 4 quadrants______________

NORMALCY: Physical Integrity, continued

Breasts Observe the client as she does a self-breast examination, teaching the skill, if necessary. Verify and list any abnormal findings, and have your findings verified by your co-assigned staff person. *This is to be done only by female students with female clients.*

Male genitalia Observe self-check of testicles, teaching the skill, if necessary. Verify and list any abnormal findings, and have your findings verified by your co-assigned staff person. *This is to be done only by male students with male clients.*

Skin Describe any lesions______________

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______________ Co-assigned RN ______________ SVN

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SELF-CARE MANAGEMENT OF MEDICATIONS

BASIC CONDITIONING FACTORS

Student's Name ________________ Date ________ Co-Assigned's Signature ________________________________

Client's Initials ___ Age ___ Sex ___ Medical Dx ___________ Reason for Contact ________________________

____________________ Temperature _____ Pulse ____ Respirations ____ Blood Pressure _____ Weight ____ Height _____

IDENTIFICATION OF THE DRUGS

	Generic Name	Trade Name	Descriptor	Rx/OTC	Dose/Freq	AC/PC/ c meals
1						
2						
3						
4						
5						
6						
7						
8						

REASONS THE DRUGS ARE BEING TAKEN

1	
2	
3	
4	
5	
6	
7	
8	

DESIRABLE AND UNDESIRABLE DRUG ACTIONS

1	
2	
3	
4	
5	

MY REPORT, SUGGESTIONS FROM THE PHYSICIAN, AND ACTIONS TAKEN

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Long Beach City College Vocational Nursing Program
SELF-CARE MANAGEMENT OF DIET

BASIC CONDITIONING FACTORS

Student's Name ________________ Date ________ Co-Assigned's Signature ______________________________

Client's Initials ___ Age ___ Sex ___ Medical Dx ____________ Reason for Contact ______________________________

______________________ Temperature _____ Pulse ____ Respirations ____ Blood Pressure _____ Weight ____ Height _____

DAILY FOODS LIST List typical daily foods eaten with each meal and estimate of the size of each portion–small, medium, large.

Breakfast	
Snack	
Lunch	
Snack	
Dinner	
Snack	

FOOD PYRAMID Put the daily foods eaten into the Food Pyramid Food Groups.

Food Pyramid Food Groups	Client's Daily Foods	Estimated Calories	Missing Items
Milk, Yogurt, and Cheese 2-3 cups. 1 1/2 c cottage cheese, 1 oz cheese = 1 cup milk			
Meat, Poultry, Fish 2-3 three oz servings. 1 egg; 2/3 cup beans, peas; 2 T peanut butter = 1 oz			
Vegetables 3-5 servings,			
Fruits including 1 citrus 2-4 servings			
Bread, Cereals, Rice, Pasta 6-11 servings			

Total caloric intake _______ Amount of excess _______ Amount of deficiency _______
Amount of fluid intake _______ Amount of excess _______ Amount of deficiency _______
Amount of alcohol intake _______ Amount of excess _______ Amount of deficiency _______

TEACHING PLAN

a.The significant observation ____

b.The client's need (check which) 1) Health teaching ___ 2) Resolution of pathology ___

c.The subject ____________________ d. The client's knowledge of the subject ____________________

e.Method(s) of information transmittal (check) 1) Verbal ___ 2) Written ___ 3) Illustration ___ 4) Other ______________

f.What the client understood ____

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Long Beach City College Vocational Nursing Program
SELF-CARE MANAGEMENT OF EXERCISE

BASIC CONDITIONING FACTORS

Student's Name ________________ Date ________ Co-Assigned's Signature ______________________________________

Client's Initials ___ Age ___ Sex ___ Medical Dx ___________ Reason for Contact ______________________________

______________________ Temperature _____ Pulse ____ Respirations ____ Blood Pressure _____ Weight ____ Height _____

Start time ______, end time ______; elapsed time ______

JOINT RANGE OF MOTION Use a protractor to verify angle size. Use X for client refusal.

	Right	Left
1. Neck:		
Flexion (30°)	___	___
Extension (30°)	___	___
Lateral rotation (30°)	___	___
2. Shoulder:		
Above head, hands prone (180°)	___	___
Above head, hands supine (110°)	___	___
Extended behind back (30°)	___	___
3. Elbow:		
Extended (180°)	___	___
Flexed (touch shoulder)	___	___
4. Wrist:		
Dorsal flexion (70°)	___	___
Palmar flexion (80°)	___	___
Lateral radial direction (10°)	___	___
Lateral ulnar direction (60°)	___	___
Rotate, prone-supine-prone	___	___
5. Fingers:		
Proximal joints, flexion (90°)	___	___
Distal joints, flexion (45°)	___	___
6. Hip:		
Flexion, straight leg (90°)	___	___
Flexion, knee bent (125°)	___	___
Abduction (45°)	___	___
Adduction (45°)	___	___
7. Knee:		
Flexion while prone	___	___
8. Ankle:		
Dorsal flexion (10°)	___	___
Plantar flexion (40°)	___	___
Inversion (35°)	___	___
Eversion	___	___
9. Toes:		
Flex	___	___
Extend	___	___

Start time ______, end time ______; elapsed time ______

BILATERAL EQUALITY OF MUSCLE STRENGTH Use a check for both right and left sides, if they are equal. Use + or - to indicate inequality, X for client refusal. Note any spasm or tremor.

	Right	Left
1. Neck:		
Lateral rotation	___	___
2. Shoulder:		
Arms horizontal, forward	___	___
Resistance against upward pressure	___	___
Resistance against downward pressure	___	___
Drifting, when eyes are closed	___	___
3. Elbows:		
Resistance against flexion	___	___
Resistance against extension	___	___
4. Wrists:		
Resistance against dorsiflexion	___	___
Resistance against planter flexion	___	___
5. Hands:		
Grasps	___	___
6. Fingers:		
Resistance against flexion	___	___
Resistance against extension	___	___
7. Hips:		
Resistance against leg raising	___	___
Resistance against adduction	___	___
Resistance against abduction	___	___
8. Legs:		
Resistance against knee bend	___	___
Resistance against knee straightening	___	___
9. Ankles:		
Resistance against plantar flexion	___	___
Resistance against dorsiflexion	___	___
10. Toes:		
Resistance against flexion	___	___
Resistance against extension	___	___

From Eliopoulos, 1987

EXERCISES Check the appropriate exercise(s) that the client is willing to do and have him/her initial this list.

Lying Down Exercises

- ___ a. Flexing the knee with opposite hand holding foot for assistance
- ___ b. Rolling, side to side
- ___ c. Scissor-like crossing of the legs
- ___ d. Raising the chest
- ___ e. Flexing the knee while lying on the abdomen
- ___ f. Bicycling
- ___ g. Lifting a pillow over the head with arms straight

Sitting Exercises

- ___ a. Circling motion of shoulder joint with the arm at the side
- ___ b. Circling the arms
- ___ c. Rotating the head
- ___ d. Flexing and extending the neck
- ___ e. Pushing up in a chair with the use of the arms
- ___ f. Kicking the legs while sitting
- ___ g. Rolling the foot on a can

Anytime Exercises

- ___ a. Rolling a pencil on a hard surface
- ___ b. Flexing the fingers around a pencil
- ___ c. Exaggerating chewing motions
- ___ d. Pulling diagonally across the back with a towel
- ___ e. Tightening the muscles in the buttocks
- ___ f. Tightening the muscles

Aerobic Exercises*

	Time	Distance
___ a. Walking	____	______
___ b. Jogging	____	______
___ c. Bicycling	____	______
___ d. Exercycling	____	______
___ e. Swimming	____	______

*With physician approval

Client's Initials ________________

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BIOGRAPHICAL SKETCH OF FAYE M. GREGORY

Faye Margaret Haddix Gregory was born in Central City, Nebraska, daughter of Lawrence and Helen Haddix. She graduated from the University of Nebraska School of Nursing with a Bachelor's Degree. She was married in Vienna, Austria and worked as a civilian ambulatory care nurse in an American army hospital in Salzburg, Austria. After returning to the United States, she worked for a short time as the administrator of a tiny community hospital in Central City, Nebraska. Her first teaching position was in a diploma school in Lincoln, Nebraska. When he finished his degree in engineering, she and her husband, John, moved to California. After the birth of their third child she completed work on a master's degree in education, with a specialization in audio-visual media.

She was a professor of nursing in the registered nursing program at Long Beach City College for many years. For the past eight years she has been program director of the vocational nursing program at Long Beach City College, and for six of those years served as department head. She has taught in many areas of nursing: fundamentals, pharmacology, medical-surgical, psychiatry, pediatrics, and critical care. She has served on numerous college and departmental committees, including the college curriculum committee, and the departmental computer utilization committee.

She worked as a professional consultant for the film, "Preventing Pressure Sores," that won a Silver Award given by the British Medical Association in 1977. She has also written and directed several video tapes on nursing subjects. In 1990 she served as a professional nursing delegate to Eastern Europe with the Citizen Ambassador Program. She presented a paper, "Teaching Nursing Diagnosis at the Beginning Level of Nursing to the Yugoslavian Nurses Association in Zagreb, Yugoslavia. Her article, "LVNs Can Help Meet the Demand for Nursing," was published in a 1991 issue of NURSEWEEK Magazine. In 1991 and 1992, she was a speaker at California Vocational Nurse Educators'

Conferences, discussing nursing in Eastern Europe and nursing diagnosis at the beginning level of nursing.

She is a Clinical Associate for the State University of New York's Regents College Degree Program. She is a member of many nursing and educational organizations including the California Teacher's Association, California Vocational Nurse Educators—Board Member-South, Faculty Association of California Community Colleges, Long Beach City College Faculty Association, National Association for Practical Nurse Education and Service, National League for Nursing, North American Nursing Diagnosis Association, Southern California Nursing Diagnosis Association, and Southern California Vocational Nursing Directors. She is listed in The Society of Nursing Professionals' Who's Who in American Nursing.

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2/22/93 — Faye M. Gregory
(date) — (student's signature)

I certify that I have read and am willing to sponsor this Major Applied Research Project submitted by Faye M. Gregory. In mu opinion it conforms to acceptable standards and is fully adequate in scope and quality as a Major Applied Research Project for the degree of Doctor of Education at Nova University.

3/17/93 — Frederick C. Kintzer
(date)
Frederick C. Kintzer, Ed.D.
MARP Advisor

I certify that I have read this Major Applied Research Project and in my opinion it conforms to acceptable standards for a Major Applied Research Project for the degree of Doctor of Education at Nova University.

3/22/93 — Donald Busché
(date)
Donald Busché, Ed.D.
Local Committee Member

This Major Applied Research Project was submitted to the Central Staff of the Programs for Higher Education of Nova University and is acceptable as partial fulfillment of the requirements for the degree of Doctor of Education.

3/29/93
(date)
Peter K. Mills, Ed.D.
Central Staff Committee Member